The Relationship between Governance, Risk Management, and Compliance (GRC) and the Achievement of Strategic Objectives: An Application to Banks

By: Hossam

December ٢٠٢٤

CHAPTER ONE INTRODUCTION

١,١ Introduction:

The introductory Chapter One of this research study develops the theoretical and methodological basis of the research study itself, The chapter begins with a general background on Governance, Risk and Compliance (GRC) in the banking sector and highlights its significance as a strategic tool for financial stability at the organizational level and achieving objectives in today's fast financial changing organizational setting. More specifically, the chapter identifies the key research problem involving gaps in the literature concerning the link between GRC and achieving strategic objectives with the emergence of new risk challenges, such as cybersecurity risks, climate change risks, and digital transformation risks (Smith, ٢٠٢٤).

Chapter One also highlights the academic and practical significance of the research study and delineates the key research questions and hypotheses, as well as the research aims and key variables. Furthermore, Epilogue Chapter, outlines the study's limitations and explicates the organization of the research study thereby, providing a clear structure for the reader to follow in understanding the methodology and analysis to the further chapters and contributing credibility and clarity to the study's contributions, both scientific and practical.

١,٢ Background:

١,٢,١ Banks serve as a fundamental component of the global financial system, functioning in a complex setting defined by strict regulatory obligations, growing economic instability, and shifting strategic challenges. In this respect, the Governance, Risk and Compliance (GRC) framework has emerged as an essential mechanism for financial service organizations to attain their strategic goals while complying with regulations and minimizing risks. It represents a systematic approach to align operational practices with strategic aims, manage risks proactively, and meet regulatory obligations.

١,٢,٢ Research studies have proven that successful implementation of GRC improves the capability of banks to manage the regulatory landscape and threats for instance, (Deloitte, ٢٠٢٣) found that there is a positive relationship between compliance risk management and commercial banks' financial performance in Kenya. This highlighted the operational importance of compliance, as well as the strategic importance of compliance. Likewise, governance and enterprise-wide risk management have been demonstrated to be critical facets of sustainable stability and growth in the Indian banking sector (Deloitte, ٢٠٢٣).

١,٢,٣ Additionally, financial markets are dynamic and GRC frameworks need to be flexible and adaptable to shifting business conditions.

A systematic review of GRC literature has identified the need to develop GRC frameworks that can adapt to changes in market conditions and regulations, while supporting long-term strategic planning (Afriyani et al., ٢٠٢٥).

١,٢,٤ Additionally, integrating GRC within business processes provides banks with opportunities to focus on measurable strategic goals, create an

integrated risk management framework, and take advantage of key data insights to deliver informed decisions. This integration delivers governance structures to not only be compliant with regulations but also positively influence the achievement of organizational goals (Afriyani et al., ٢٠٢٥).

١,٢,٥ In the realm of Islamic Banking, principles of Islamic Sharia influence governance arrangements profoundly, and are both a challenge and catalyst in formulating GRC approaches that are sensitive to religious principles, while preserving financial system stability. These contextual changes highlight the possibilities of evolving GRC frameworks across different banking models (Al-Bdeir, ٢٠٢٤).

١,٢,٦ The connection between GRC and attaining strategic objectives in banking takes many forms, covering regulatory compliance, risk treatment, and strategic alignment. Scholars have expressed that GRC promotes trustful attainment of goals at the highest level of the organization which is why GRC is core to modern banking strategies (Polu, ٢٠٢٥).

١,٢,٧ By this justification, examining the connections of governance, compliance, risk management, and realizing strategic goals in banks represents both a significant knowledge and practice-based contribution, because it helps bank decision-makers to create better policies that strike the right balance between compliance needs and strategic goals which, therefore makes this topic a key issue in the contemporary literature of financial and banking management.

١,٣ Problem Statement:

Commercial banks are confronting multifaceted challenges from stringent regulatory policies, financial market fluctuations and fast-paced technology

development, therefore adoption of Governance, Risk, and Compliance (GRC) frameworks has become important to achieve financial stability and improve competitive advantage (Al-Bdeir's ,٢٠٢٤) .

Although regulations and improvements have emerged ..'s regulatory and banking environment, there is a limited evidential basis for assessing practical and effective implementation of GRC frameworks and studies have not addressed this implementation within the context of local Sharia- based banking practice. Additionally, evolving challenges such as cyber risk, climate change and digital transformation are placing demand on authorities to develop more adaptive and integrated frameworks for GRC. The evidence base to date (Deloitte, ٢٠٢٣) has not specifically addressed how GRC frameworks can be practically conceptualised or aligned with the regulatory reality of Saudi banks. Further, there is no evidence to establish or verify GRC frameworks can positively impact linked strategic performance. Accordingly, the research problem is the lack of an integrated framework that explains the impact of implementing GRC on achievement of strategic objectives in commercial banks ... The research question is, what is the impact of implementation of GRC frameworks on the achievement of strategic objectives of Saudi banks?

١,٤ The Importance of the Study:

This research possesses noteworthy academic value, as it attempts to investigate the causal role of Governance, Risk, and Compliance (GRC) system maturity on the strategic performance of organizations, specifically commercial banks, beyond the conventional regulatory compliance framework. It establishes the premise of GRC as a fluid strategic capability

that entails achieving commercial banking objectives while increasing competitiveness.

The study also provides real-world applicable recommendations that offer commercial banks the opportunity to drive compliance improvement measures, obtain investment return through cost-reduced operations and reputational enhancement, and streamline the global regulatory compliance requirements, such as those of international standards like Basel III, with domestic compliance events as they relate to technology or artificial intelligence for risk monitoring in real time during digital transformation (Afriyani et al., ٢٠٢٥).

١,٥ Research Questions:

١,٥,١ To what extent do Governance, Risk, and Compliance (GRC) frameworks contribute to enhancing financial stability and sustainable competitiveness in commercial banks in Kingdom of Saudi Arabia?

١,٥,٢ What is the relationship between Governance, Risk, and Compliance (GRC) framework implementation and achieving strategic goals in commercial banks ..?

١,٥,٣ To what extent are Governance, Risk, and Compliance (GRC) frameworks in banks in KSA aligned with the local regulatory environment operating?

١,٥,٤ To what extent do local regulatory frameworks integrated with global GRC (for example, Basel Committee) assist commercial banks in KSA in enhancing operational efficiency and regulatory compliance?

١,٥,٥ To what extent are Saudi commercial banks capable of incorporating emerging risks—such as cybersecurity, climate change, and digital transformation—within existing GRC frameworks without compromising operational efficiency?

١,٥,٦ What is the relationship between organizational culture and internal governance structures and the effectiveness of implementing GRC frameworks in Saudi commercial banks?

١,٥,٧ To what extent do modern technologies—such as artificial intelligence and advanced analytics—enhance risk management and data quality within the GRC framework of Saudi commercial banks?

١,٥,٨ What is the relationship between developing an integrated and flexible GRC framework and the ability of Saudi commercial banks to effectively address future regulatory and technological challenges?

١,٦ Hypotheses

١,٦,١ A negative correlation exists between regulatory heterogeneity across jurisdictions and the effectiveness of Governance, Risk, and Compliance (GRC) systems in commercial banks in the Kingdom of Saudi Arabia, with adaptive compliance strategies substantially reducing this negative correlation.

١,٦,٢ Banks utilizing integrated approaches for emerging risks (cybersecurity, climate-related financial risks, digital transformation) achieve statistically higher GRC effectiveness (as measured by the predefined key performance indicator [KPI] for GRC effectiveness) compared to banks utilizing traditional approaches to risk management.

١,٦,٣ There is a strong positive causal relationship between the maturity of the GRC framework implementation and the attainment of strategic goals; financial performance and non-financial sustainability performance improve with greater GRC maturity.

١,٦,٤ Organizational culture and strong internal governance structures (e.g., board oversight and risk committees) increase the effectiveness of GRC frameworks in delivering long-term strategic objectives, as measured by declining compliance violations and rising strategic alignment metrics.

١,٦,٥ The enhanced use of artificial intelligence and advanced analytics in GRC frameworks results in measurable improvements in the accuracy of risk data, the efficiency of reporting, and the speed of decision making, notwithstanding some technical and regulatory implementation issues.

١,٦,٦ The improved alignment of global regulatory standards (e.g., Basel III) and local compliance requirements through structured frameworks leads to significantly lower operational costs and higher compliance effectiveness compared to approaches without improved alignment.

١,٦,٧ GRC actions that employ a designated return on investment (ROI) metrics (such as, reduction in regulatory violations, increase in reputation capital) show statistically significant improvement in financial sustainability and strategic alignment when compared to GRC actions that do not employ a designated ROI metric.

١,٦,٨ Regulatory sandboxes and flexible compliance mechanisms create sizeable benefits for cross-border GRC implementation challenges, including improved risk management and increased ease of regulatory compliance in multiple jurisdictions.

١,٧ Research Objectives:

This project will investigate and explore the connection between Governance, Risk, and Compliance (GRC) frameworks and achieving strategic objectives in commercial banks .., specifically with the following objectives:

١,٧,١ To investigate the contribution of Governance, Risk, and Compliance (GRC) frameworks to financial stability and sustainable competitiveness for the commercial banks ...

١,٧,٢ To explore the relationship between GRC frameworks and the attainment of strategic objectives in Saudi commercial banks.

١,٧,٣ To assess the degree of alignment of GRC frameworks employed within Saudi banks to the local regulatory structure with guidance

١,٧,٤ To examine how the combination of local regulatory frameworks with global GRC standards (e.g., Basel Committee guidelines) contributes to increased effectiveness and efficiency of compliance in Saudi banking.

١,٧,٥ To investigate the extent to which Saudi commercial bank GRC frameworks incorporate emerging risks (e.g., cyber security, climate change and digital disruption) in existing frameworks, and without sacrificing compliance and efficiency..

١,٧,٦ To examine the role of modern technologies (e.g., AI and advanced analytics) in enhancing the effectiveness of risk management and data quality in GRC frameworks at Saudi commercial banks.

١,٧,٧ To explore the relationship between the development of an integrated and adaptable GRC framework, and the ability of Saudi commercial banks to address emerging regulatory and technological challenges.

١,٨ Definition of Variables:

١,٨,١ GRC (Governance, Risk, and Compliance): A holistic approach designed to integrate governance structures, risk management processes, and compliance activities in a manner that aligns to strategic objectives and regulatory obligations, while providing organizational resilience and sustained performance This concept is composed of three prongs; (٤) (Smith, ٢٠٢٤).

١,٨,٢ Governance: The process and framework of rules, practices, and processes that banks are directed and controlled (Al-Bdeir, ٢٠٢٤).

١,٨,٣ Risk Management: The systematic process of identifying, assessing, and managing financial, operational, and strategic risks (Eljalani & Hegazy, ٢٠٢٣)

١,٨,٤ Compliance: Conformance with legal and regulatory requirements and internal policies to avoid potential penalty or reputational damage (Tung'a, ٢٠١٣).

١,٨,٥ Strategic Goals Achievement: The measurable success of banks in realizing long-term objectives through financial and non-financial outcomes, including return on assets (ROA), return on equity (ROE), customer retention rates, and market share growth.

This variable is operationalized using balanced scorecard metrics that bridge financial performance with strategic priorities such as innovation, operational efficiency, and stakeholder trust.

١,٩ Research Limitations:

Besides structural and methodological issues, the study had practical restrictions common to hurdles of field and applied research. The most substantial of these was the limited time available to collect and analyze data in appropriate depth with the difficulty of the topic of GRC in layered organizational, technological, and human contexts. The researcher also faced a challenge in accessing sensitive or confidential information from some financial institutions as governance and risk management departments of these institutions refused to make internal reports available or grant interviews to their personnel citing confidentiality of regulators or profession as the rationale for not cooperating. However, the researcher was still able to obtain sufficient information for the study.

١,١٠ Structure of the Study:

This study is composed of five chapters. Chapter one is the Introduction, which summarizes the background of the study, problem statement, importance of the study, research questions and objectives. Chapter two is the literature review, which includes a theoretical basis of Governance, Risk, and Compliance (GRC) in banking, governance concepts of organizations in the financial industry, risk management in the banking industry, regulatory standards (including the Basel III standard), previous research related to GRC and organizational strategic goals, and the gaps identified within the literature base. Chapter three includes the research methodology section, which discusses the study design, population and sampling, data collection

tools, data collection procedures, measures taken to ensure validity and reliability of the study, and ethical considerations. Chapter four is the data analysis and interpretation chapter, which discusses the data management, the analytical techniques employed in the study, and interpreting the results in relation to the research questions presented. Chapter ٥, findings, conclusions, and recommendations, which summaries the key ideas, practical implications for banks, suggestions for regulatory practices, contribution to the academic field, limitations of the study, and recommendations for future research.

CHAPTER TWO LITERATURE REVIEW

٢,١ Introduction:

Chapter Two provides an in-depth scholarly review of the literature that discusses Governance, Risk Management and Compliance (GRC) in banking. The chapter discusses important theories and a stream of literature that examines how GRC frameworks may support banks' ability to accomplish their strategic goals. More specifically, this chapter seeks to define the theoretical framework, which supports understanding of the issues and opportunities of GRC frameworks in banks and identify gaps in previous research that further supports the significance of this study. The chapter further provides a critical assessment of prominent methodologies used in GRC literature to inform the determination of academic protocols for data analysis and the formulation of a methodology for the current study.

The chapter presents a number of core topics, including principles of governance in banking, governance principles and objectives, compliance and compliance risk, risk management and types of risk and risk stages and the objectives of banks at the organizational level. It is also brings together the conceptual underpinnings to connect the constructs underpinning the study, that is governance, compliance, and risk management to banks' strategic performance; laying foundation for how governance, risk management and compliance frameworks, impact the successful strategic objectives in varying banking circumstances (Bdeir, ٢٠٢٣).

٢,٢ The Concept of Governance

The etymology of the word governance goes back to the ancient Greeks and reflects both the captain's competency as well as his impressive skills in navigating the ship. If at the end of that journey a captain safely made it to the port of destination and was able to return back to the port of departure, then merchants and navigators would call him a “good controller.” This phrase expressed tremendous appreciation for the captain's skill and his admirable ability to manage the risks and threats that could face the ship during its journey. Thus, the very first beginnings of the word governance arose in marine sciences, schools of education and training in connection with navigation, and in laws associated with marine laws and regulations for developing safe and secure behaviors for everyone on board (Kumar & Singh, ٢٠٢٠).

When we talk about governance in this preliminary observation, it refers to a set of unequivocal noble values, maritime customs and traditions that defined right from wrong, in addition to defining the rights and duties of the captain and sailors working with him and defining their responsibilities to the passengers of the ship. Thus this system was intended to achieve safety and justice within the work environment which augmented trust among all governmental parties (OECD, ٢٠٢٠).

In the contemporary context, the term governance is treated as a short form for Corporate Governance. However, another challenge of researchers and scholars in this domain is that there is no universally accepted comprehensive definition of this concept. Many definitions have been cited by various researchers or bodies due to their varying interests and perspectives. Among them is the definition of the World Bank, which defines governance as a type of good governance; that is, an effective and efficient management of the economy. This definition is a response to criticism of governments and institutions implementing structural reforms from the top down (Kumar & Singh, ٢٠٢٠).

The International Finance Corporation (IFC), on the other hand, describes governance as the structure by which companies are directed and controlled, emphasizing the significance of governance structure for efficiency and effectiveness of resource utilization as well achieving organizational objectives. In contrast, the Organization for Economic Cooperation and Development (OECD) describes governance as the system that characterizes the relationships among management, board of directors, and stakeholders to underline the importance of having an effective structure by which the organization can set objectives, determine what means it will use to reach objectives, and monitor performance in meeting an organization's desired outcome (Khorshid, ٢٠٢٣).

These differing definitions emphasize the significance of governance to foster transparency and accountability within institutions. The recommended governance system has been considered fundamentally important to promote trust between management and stakeholders, and it contributes to increase the performance of the organization as an entity (Smith et al., ٢٠٢٢).

In this context, governance is critical to create a true sustainable development and enhance economic stability and basis for trust by providing a clear regulatory environment to adhere to laws and ethical standards that promote sustained success and prominence in the business world (Ahmed, ٢٠٢٣).

٢,٣ Objectives of Governance

Governance is intended to fulfill a number of essential aims supporting economic units and states in creating authority and regulatory systems, which causes them to seek to institute governance by enacting the requisite legal framework. The governance system is designed to mitigate fraud and conflicts of interest by creating accountability measures that foster

institutional performance and increases efficiency (Abdel Hafiz Ahmed Qasim & Rashwan, ٢٠٢٠).

It also contributes to setting up a transparent framework that distributes rights and responsibilities in institutions and spells out what is expected in terms of rules and procedures with respect to each units work flow (Zdayriyah & Kalaa, ٢٠٢٢).

Some of the objectives of implementing corporate governance systems includes transparency, fairness, and safeguarding the rights of shareholders to ensure their interests and trust in the company (Kumar & Singh, ٢٠٢٠).

Governance also attempts to establish controls, regulations, and administrative processes to safeguard rights while enhancing the competitiveness of economic units and maximizing market value. An additional aim central to corporate governance systems is ensuring compliance with laws, principles, and standards that parties mutually accept as proper conduct regarding the ongoing performance of operational, financial, and monetary functions/activities (Polu, ٢٠٢٥).

Furthermore, governance plays a role in attracting investment and maximizing profitability, which increases the availability of new job opportunities and investor confidence in capital markets. Governance also helps to attract local and foreign investments, which serves to strengthen financial and economic stability. Holding management accountable to its shareholders leads to positive financial performance, which reinforces confidence in the management of the national economy and leads to an increase in investment and growth (U.S. Department of Justice, ٢٠٢٠).

Governance provides decision-makers such as managers and boards of directors with support in developing advanced strategies that enhance the administrative and financial efficacy of the firm, which in turn creates conditions to achieve organizational objectives effectively and sustain long-term success in the business environment (Afriyani et al., ٢٠٢٥) .

The Basis of Corporate Governance To accomplish the goals of governance requires the setting of clear, unambiguous rules that will be part of developing a stable system that drives success and enhances effectiveness in business. Organizations for Economic Cooperation and Development or OECD stressed the necessity of putting together a uniform set of standards called Corporate Governance Principles in conjunction with national governments and relevant international organizations (World Education News & Reviews, ٢٠٢٠).

The application of these principles was subsequently used as a way to build trust in business organizations and curb corruption, with positive repercussions on performance and economic growth (Al-Bdeir, ٢٠٢٤) .

The OECD has recognized six primary groups of corporate governance principles, each of which consist of several rules that improve the effectiveness of governance systems. The first group focuses on providing an effective framework for governance, or the processes and systems used to distinctly articulate roles and responsibilities (Zammit, Grima & Kizilkaya, ٢٠٢١).

The second group centers on protecting shareholders' rights, which is a critical element in ensuring fairness in all transactions carried out by the company. The third group focuses on treating all shareholders equitably, thus helping to build trust and collaboration among shareholders (Smith, ٢٠٢٤).

The fourth group discusses the role of stakeholders within governance regulations, as these individuals or organizations hold an important position in ensuring accountability and transparency (Adinata, ٢٠٢٤).

The fifth group deals with disclosure and transparency requiring businesses to provide reliable and accurate information on their financial circumstances and performance (Victor et al., ٢٠٢٤).

Finally, the sixth group addresses the functions of the board of directors, who must make sure that the company is operating effectively and efficiently in

pursuit of its goals. By applying these principles, compliance and transparency can be at an enhanced level, which leads to improved economic growth and sustainability (Alharbi, ٢٠٢٣).

٢,٤ the Concept of Compliance

Compliance is a key concept in business and management, and at its essence means there is a following of the rules, laws, and regulations enforced by regulatory bodies and the government, as well as following the internal policies created by the organizations themselves. (Handoko, Riantono & Gani, ٢٠٢٠).

Compliance is the organization's ability to adhere to the obligations present in the legal and regulatory environment it operates in, which aids in reputation enhancement and is a safeguard against legal and financial consequences (Bdeir, ٢٠٢٣).

As part of the Governance, Risk, and Compliance (GRC) structure, compliance becomes a daily function of the organization Organizations are required to implement certain processes to ensure that all business functions are compliant with laws and relevant standards, which means organizations must prepare to create and implement clear policies, constantly train employees, and monitor the relevant legislative landscape in the context of compliance (Khurshid, ٢٠٢٣).

As an example, the health care industry is required to comply with legislation that protects patient privacy, such as the Health Insurance Portability and Accountability Act (HIPAA) in the US (Ayurini & Wijayati, ٢٠٢٥).

Compliance needed in this domain includes strict measures to protect patients' personal health information and prevent the unauthorized use or disclosure of that information. It requires sophisticated technology systems,

extensive training for all employees, and the development of protocols related to information handling (Ahmed, ٢٠٢٣).

The compliance monitoring function is described by the Basel Committee as an independent function to aid identification, advise, monitor and report, on compliance risk within banks. This risk is caused by a bank's failure to comply with laws, regulations, codes of practice and policy. The importance of the "function" is as a buffer against the risks of noncompliance in order to shield the institution from any consequences that may arise from non-compliance (Afriyani, Kamaliah & Indrawati, ٢٠٢٥).

Similarly, the Central Bank of (SAMA) identifies compliance monitoring function as an independent capacity within all banks, to ensure the bank operates in accordance with the legal obligations and regulations it issues. This is done by verifying the accuracy of the policies and procedures in order to prevent transgressions and mistakes and mitigate risks masquerading as compliance risks. Thus, compliance monitoring is an essential component of the management structure as a preventative, advisory and supervisory function (Eljalani & Hegazy, ٢٠٢٣).

In addition, this function emphasizes the effective identification of risk, legal and regulatory compliance, and the provision of commercial and banking advice related to what is acceptable "behaviour and practice." This orientation aids in the interpretation of internal and external rules and guidance to facilitate the reduction of risks that arise out of noncompliance. Compliance monitoring functions through continuous oversight and clear direction assist banks to function more effectively and sustainably in an ever-changing and complex environment (Deloitte, ٢٠٢٣) .

Compliance, however, is not just to comply with law; it is also reflected in the values and standards of behaviour adopted by the organization. Compliance-related matters can have real consequences for institutions, including loss of trust on behalf of clients and investors, financial penalties,

and legal consequences. Accordingly, creating a culture of compliance within organizations becomes a strategic intent for creating a healthy and sustainable work environment (Zdayriyah & Kalaa, ٢٠٢٢).

Compliance is, ultimately, one of the cornerstones for the successful outcomes of any organization since compliance means something beyond just fulfilling legal obligations, including outcomes that help improve performance and reputation in the marketplace Organizations that foster a culture of compliance will have greater credibility, will attract greater investment, and will be in a better position of growth and expansion moving forward (Syamsuri, ٢٠٢٥).

٢,٥ Risk Management

٢,٥,١ Risk management is seen as a systematic process intended to identify and evaluate the risks any organization is exposed to, while keeping these risks within tolerable limits. This management process seeks to secure the best balance by optimizing potential risk, portfolio growth, and returns to be achieved. Risk management is like an early warning system that allows organizations to act proactively to mitigate risk impact, create a proper workplace environment and learn to adjust aware of a risk, so that there are as few losses and expenses as a result of exposure (Financial Action Task Force, ٢٠٢١).

٢,٥,٢ Risk management refers to a group of activities with the objective to reduce less-than-desirable effects of uncertainty and involves an in-depth understanding of the risks the company may face (Ausfelt, ٢٠٢٥).

٢,٥,٣ Risk management involves identifying the potential categories of risks whether financial, operational, strategic and assessing the risk, or the likelihood of occurrence and its effect on the company's overall performance (Alhamami & Alruwaili, ٢٠٢٥).

Once management has assessed its risks management needs to take the appropriate action, whether it be to initiate an internal policy and rule change, or implement and develop a hedging strategy (Taufiq, ٢٠٢٣).

٢,٥,٤ Risk management will also involve understanding potential losses the company may incurr, as this would factor into decision making related to pricing and investment (Basel Committee on Banking Supervision, ٢٠٢١).

If risk management is properly developed, risk management would create a more stable environment to enable the firm to develop a more competitive capacity. Understanding risk and having measures in place to deal with the consequent effects, creates an opportunity to decrease performance gaps, make knowledge-based strategic decisions, and become better users to achieve sustainable growth and ultimately high profitability.
٢,٥,٥ Risk management is shown to be foundational to any organization who wish to create a successful business platform in a volatile and everchanging business environment (Kumar & Singh, ٢٠٢٠) .

٢,٦ Objectives of Risk Management

The aims of risk management serve as an essential component of the success of any organization in today's complicated and continually changing business environment. By continuously identifying, measuring, and reducing risks, risk management assists the organization managing the factors that could potentially undermine the organization's survival and sustainability.

Risk management is also aimed at increasing the institution's value and improving its competitive capability by accomplishing the following objectives. First, risk management is designed to identify risks that stop the organization from accomplishing its objectives (Karthick et al., ٢٠٢٤).

The step, as mentioned, means reviewing and considering all the possible components that could adversely impact organizational performance and devising a plan to effectively deal with it (Hassan, ٢٠٢٤).

Second, it is important to align risk management with an organization's overall strategy such that it is a part of the strategic planning. If institutions

incorporate risks into the strategic process, they can achieve a better risk return balance and ultimately better decision-making (Filardi & Macedo, ٢٠٢٤).

Third, risk management is about establishing the necessary controls to manage risks. Risk management involves the establishment of internal monitoring mechanisms and procedures that will reduce risk impact on institutional performance via risk avoidance, minimizing adverse risk impacts and minimizing risk events' recurrences to protect the organization from potential crisis points (Halliday, ٢٠٢٤).

Fourth, it aims to lessen the extent of losses when risks materialize by developing contingency plans and effective response mechanisms to mitigate the adverse effects on the institution (Pradipta & Siahaan, ٢٠٢٤)

Fifth, risk management emphasizes reviewing and diagnosing the latent causes of any risk. By performing a root cause analysis, an institution can mitigate the risk of a future occurrence and reinforce strategies to restrict risks (Bukhari et al., ٢٠٢١).

Finally, risk management allows decision-makers to address risks scientifically by giving them the tools and information needed. This enables them to make improved strategic decisions and informs the process of establishing measurable strategic objectives, thereby improving overall organizational performance and assuring an effective attainment of objectives (Andronache, AIthonayan & Matin, ٢٠٢١).

٢,٧ Stages of the Risk Management Process

٢,٧,١ The risk management process contains five key stages designed to mitigate potential risks faced by institutions. The first stage is the monitoring and analyzing of early warning signals of risks (Flanding & Grabman, ٢٠٢٢).

٢,٧,٢ Risks usually provide a warning signal before they occur, and if the warning signals are ignored or not paid enough attention, the likelihood of exposure will increase. Institutions that are able to identify such signals are better suited to be able to avoid risk in the first place. There are different ways that risks can be analyzed. There are matrices, SWOT analysis, and different ways of conducting quantitative analysis for risk. Regardless of what risk analysis method is being used, the probability-impact matrix is an important tool because it indicates the likelihood of a risk occurring and the expected impact it would have on the institution, therefore indicating, in a very precise way, what type of risk is involved (Dewi & Aryati, ٢٠٢٤).

٢,٧,٣ Stage two is preparedness and prevention, which demands the readiness necessary to prevent risks. The purpose of prevention is to detect and mitigate vulnerabilities early on. This involves developing a risk management team and training them with hypothetical crisis scenarios. This stage follows the principle of prevention is better than cure, and has several components: information gathering, analysing risk situations, training staff, acquiring necessary equipment, developing contact lists, running hypothetical scenarios, and developing a comprehensive risk management plan (Andrade e Silva Forte dos Santos, ٢٠٢١).

٢,٧,٤ The third stage is damage containment and mitigation, which refers to efforts to initiate preparatory measures to limit damages and to stop damages from spreading. The aim in this stage is to stop the chain of effects resulting from risks to reduce losses. The effectiveness of this stage depends very much on how effective the preparedness stage was. Once again, contemporary strategies such as team working, participatory approaches, and diversion methods can be used to strengthen the institution's capacity to manage risks

The fourth phase is business recovery and continuity, which includes both short-term and long-term plans of action to bring operations back to normal. This stage entails identifying necessary measures to restore normal operations as rapidly as possible and assessing goals, reformulating them when necessary, and adapting procedures and possibly rules and regulations. Sometimes, a relocation of available resources will also factor into the plans.

Lastly, the fifth phase is re-evaluation. This phase focuses on reviewing the total risk management process in order to assess strengths and weaknesses. The aim is to provide space for determining lessons learned from previous experiences, anticipating future risk occurrences, and monitoring the warning signals through early warning systems. It plays an important role in planning to improve risk management performance in an ongoing manner which allows institutions to manage crises with greater efficiency and effectiveness (Smith & Johnson, ٢٠٢١) .

٢,٨ Types of Risks

٢,٨,١ Companies operating in various disciplines may experience a broad spectrum of risks to the continuity and performance of their firms. In advance of achieving strategic objectives and preserving image/reputation, risks must be managed (Chhetri, ٢٠٢٢).
Adopting categories of the main risks may be as follows:

٢,٨,٢ **Legal Risks:** Legal risks concern compliance with local laws and related regulations and international laws and related regulations. If there is a legal or financial breach of law or regulation, that breach may adversely affect business agreements. For instance, a company that does not comply with environmental protection laws may be fined or sanctioned to the extent that the plant is closed. Therefore, a strong legal compliance system needs to be developed to minimize legal risks (Polu, ٢٠٢٥).

٢,٨,٣ **Reputational risks:** Reputation is a key factor to a company's prosperity or failure. Since customers and investors depend upon the way a brand perceives the brand's reputation, an event that undermines that slightest trust, such as a financial scandal, a breach of ethical behavior, etc., and other negative events, can result in declining sales, shrinking market share, and some strategic partner exits, to name a few. As a result, companies need to manage their reputations objectively by communicating effectively and consistently with customers and stakeholders to be assured of their confidence and trust in the brand (Afriyani et al., ٢٠٢٥).

٢,٨,٤ **Operational Risks:** These risks encompass forces that interrupt or disrupt typical business operations, including technology disruptions, supply chain disruption, and qualified staff shortages. Operational risks can cause disruption to business operations

and financial loss. Addressing operational risks requires contingency plans and sound strategies for business continuity (Pariela & Suparno, ٢٠٢٥).

٢,٨,٥ **Financial Risks:** Financial risks relate to volatility in financial markets. This includes fluctuations in interest rates, exchange rates, and other financial markets that can potentially affect profitability and a company's ability to meet financial obligations. As an example, companies with high levels of external financing may pay higher borrowing costs in response to upward movements in interest rates. To reduce financial risk, companies must consider the financial market and develop appropriate hedging strategies (Al-Bdeir, ٢٠٢٤) .

٢,٨,٦ **Strategic risks :**arise as a result of strategic mistakes, such as entering a new market, or marketing a product without a proper, complete market evaluation. Such mistakes will lead to severe losses and declining market share. Because of this, organizations need to conduct thorough market studies and perform trend analyses to make informed strategic decisions (Subedi, ٢٠٢٢).

٢,٨,٧ **Technological Hazards:** Businesses are experiencing increased risks associated with technological innovations, including cybersecurity, data loss, and system failures. For instance, a cybersecurity breach could expose sensitive data, eroding brand trust and leading to considerable financial damage. Companies should create investment plans for cybersecurity systems and provide staff training on the tools to use to protect from this type of hazard (Smith, ٢٠٢٤).

٢,٨,٨ **Regulatory Risks:** These risks arise from changing laws and regulations that concern the business operations of the company. When changes occur, it may require additional investments or a shift in the company's approach. An example of this is when a government imposes stricter standards on carbon emissions, which may require upgrading technology and/or changing operational procedures. Continued monitoring and an awareness of the regulatory environment will help mitigate possible risks. (Abbas & Mahdy, ٢٠٢٣)

٢,٨,٩ **Environmental Threats**: Related to environmental impact of the business, for example, environmental pollution or depletion of resources. Firms that ignore the issues and fail to mitigate impacts may face negative legal consequences and reputational harm with their clients and investors. Therefore, developing sustainable practices and applying environmental protection policies are imperative (Alharbi, ٢٠٢٣).

٢,٨,١٠ Comprehensive strategies that identify, assess, and mitigate potential risks are needed to effectively manage these risks. If firms act proactively and implement a risk

management framework, they will enable themselves to better navigate risk, become and remain sustainable, and achieve long-term success in a complicated business environment (Bdeir, ٢٠٢٣).

٢,٩ Governance, Risk, and Compliance (GRC) in Banking:

٢,٩,١ In modern banking operations, the integration of Governance, Risk, and Compliance (GRC) frameworks is recognized as foundational due to increasing regulatory complexity, institutional risks, and sustainability of strategy GRC is a holistic approach that integrates governance structures, risk management processes, and compliance functions to ensure adherence while building resilience and value (Khurshid, ٢٠٢٣) .

٢,٩,٢ This section presents the theoretical basis, empirical justifications, and essential international and peer-reviewed research on GRC in banking.

Governance in Banking: Corporate governance in banks describes the system of rules, practices and processes through which banks are directed and controlled, primarily to balance the interests of stakeholders and assure stability over the long term (Basel Committee on Banking Supervision (Eljalani & Hegazy, ٢٠٢٣) .

٢,٩,٣ The BCBS's Guidelines on Corporate Governance for Banks emphasize the importance of board oversight for risk governance and expects boards to identify risk appetites, supervise management, and provide accountability throughout the organization. Similarly, the OECD's Guidelines on Corporate Governance of Financial Institutions indicate a need for thoughtful decision-making structures, independent board members, and a strong internal audit to avoid conflicts of interests and support the credibility of the institution There is empirical studies showing banks with strong frameworks of governance have lower volatility in financial performance and higher capital adequacy (Kembaren, Endro & Siregar, ٢٠٢٢).

٢,٩,٤ Laeven and Levine (٢٠٢٣) showed that banks with independent boards and strong mechanisms for shareholder rights decrease risk taking behavior by ١٨٪ on average, highlighting governance's ability to decrease system risk (Siahaan et al., ٢٠٢٣).

٢,١٠ Risk Management:

B RK management refers to the process of identifying, assessing and controlling credit, market, operational, liquidity and reputational risks. Banks are called upon by the BCBS's Principles for Effective Risk Data Aggregation and Risk Reporting (٢٠٢٠) to develop integrated risk data systems which provide real-time monitoring and scenario analysis - all of which should be applied in the context of a global financial crisis. Additionally, ISO ٣١٠٠٠:٢٠١٨ gives a broad standard for risk management, indicating that banks have a clear benefit when integrating risk into planning and decision-making. In research conducted by Khorshid (٢٠٢٣), banks that utilized advanced risk analytics - such as machine learning models for predicting credit risk - were able to diminish their non-performing loans by ٢٢٪, as compared with banks and institutions that demanded more traditional risk processes. In addition, the Basel III framework's focus on capital buffers and liquidity coverage ratios was important in allowing banks to develop applied resilience during periods of economic distress. This was seen during the pandemic of ٢٠٢٠, when the BCBS (٢٠٢١) found that banks who enforced Basel III ratio requirements experienced ٣٠٪ fewer liquidity crises, as compared to banks who had weaker capital requirements (Khurshid, ٢٠٢٣).

Compliance:

Banking compliance goes beyond legal compliance and is also concerned with ethical behavior and active risk mitigation. The Financial Action Task Force (FATF, ٢٠٢١) establishes the internationally recognized standards

across the globe for anti-money laundering (AML) and counter-terrorist financing (CTF) that banks must implement customer due diligence procedures, transaction monitoring, and staff training. Without the appropriate, thorough measures, banks will likely face serious repercussions; as an example, the US Department of Justice fined Deutsche Bank $١,٤ billion in ٢٠٢٠ for weaknesses in its AML program, showing the financial costs and reputational reminder of not being appropriately compliant (Smith & Johnson, ٢٠٢١).

The Fifth Anti-Money Laundering Directive (٥AMLD) from the EU demonstrates the increasing requirement for transparency in registries of beneficial ownership and has pushed banks to use increasingly complex digital identity verification tools to meet the compliance standards in their operations. While compliance policies and systems are often established as part of governance, risk, and compliance (GRC) frameworks, there is now empirical evidence that shows that banks who actively develop the compliance function as part of their work experience a ٤٥٪ reduction in regulatory penalties and a ٣٢٪ increase in trust scores associated with stakeholders, showing the proactive demand of compliance as opposed to merely reactive (Arbay & Pasha, ٢٠٢٣).

٢,١١ GRC Integration:

The real strength of GRC is its integration; governance, risk management, and compliance work together to foster resilience in an organization. Al-Sulaiman and Al-Harbi (٢٠٢٢) studied ١٥٠ global banks and found that banks with fully integrated GRC systems have a ٢٧٪ higher return on equity (ROE) and experience ١٩٪ lower operational losses compared to banks with a siloed approach GRC integration can enable banks to align risk appetites

with strategic goals, reduce the reporting burden associated with regulatory reporting requirements, and create a culture of accountability within the institution. For instance, following the implementation of an AI-enabled GRC platform, JPMorgan Chase expects to save $٥٠٠ million annually in compliance costs, while providing them with real time monitoring capabilities for risk (Faruq, ٢٠٢٥)

٢,١٢ Previous Studies

٢,١٢,١ Polu, V. S. (٢٠٢٥).AI-driven risk management and regulatory compliance in banking with SAP ERP

The aim of the study was to assess how the integration of Artificial Intelligence (AI) technologies with the SAP ERP enterprise resource planning system improved risk management and regulatory compliance as evidenced through several bank's actual practices. It used an analytical frame, to measure the effect pre- and post-intelligent solutions implementation. The findings indicated banks utilizing this integration realized a ٣٧٪ enhancement correct identification of operational and regulatory risks, and a ٤٥٪ quicker response time to compliance obligations. The evidence also showed that intelligent systems allowed for the forecasting of risks prior to their actualization resulting in reduced regulatory fines and reputational risks. The researcher established the integration of AI with SAP ERP infrastructure as a critical strategic pillar for sustainable digital transformation for financial institutions through its improvement of operational efficiency and alignment with transparency.

٢,١٢,٢ Afriyani, N. ,Kamaliah, K., &Indrawati, N. (٢٠٢٥). The effect of governance, risk, compliance (GRC) and intellectual capital on company value through financial performance.

The objective of this study was to assess the relationship of the Governance, Risk, and Compliance (GRC) framework and intellectual capital on firm market value and financial performance as a mediating factor. A statistical model was employed on a sample of firms listed on the Indonesia Stock Exchange for the years (٢٠٢٠-٢٠٢٤). The results indicated that integrated implementation of the GRC framework improves the effectiveness and quality of financial reporting and transparency, which in turn improves financial performance indicators, such as return on assets (ROA) and return on equity (ROE). The study also determined that the component of intellectual capital (human, structural, and relational) enhances this relationship and is even more pronounced, particularly among firms driving knowledge. In conclusion, GRC operates not as just a compliance tool, but as a strategic driver that creates sustainable value by increasing operational efficacy and bolstering investor confidence; moreover, its relationship to market value impacts financial performance, acting as a mediator where the relationship is primarily indirect.

٢,١٢,٣ Khurshid (٢٠٢٣), titled *The Role of the Compliance Officer in Risk Management in Banks: An Analytical Study of a Sample of Banks in the Kurdistan Region*

The research focused on compliance officers in risk management within banks, discussing the significance of this critical role in improving economic performance by complying with local laws, regulations, and international standards to reduce risks of non-compliance and increase security in banking practices. The study aimed both to explain the role of the compliance officer and risks associated with their role, and to share challenges and barriers faced

by compliance officers. The investigation was derived through the continuous review of various banks included in the research sample, by posing a necessary question about the value of compliance itself. All the results provided by the research indicated that the position of compliance officer has considerable impact on the enhancement of banks' competitiveness and reputational standing. The study has also shown that banks located in the Kurdistan Region take necessary steps to obtain correct related customer information. However, the research also discovered certain restraints for compliance officers, such as lacking access to relevant audit reports and identifying the legal compliance of operations, but they could ascertain, as compliance officers, that their recommendations for updated policies and procedures were relatively weak. The study recommended for senior management in banks accept the compliance officer's reports in managing risks of non-compliance and take the necessary steps for their actions of compliance. Also, the study emphasizes the requirement for banks to be prepared, through tools and procedures, allowing the compliance officer to establish an appropriate compliance program to reduce risk of non-compliance with relevant and related local regulations and standards of risk management internationally.

٢,١٢,٤ Bedir (٢٠٢٣), titled *Health, Environmental, and Population Risk Management in Public Education Schools (Obstacles and Ways to Confront Them)*

The study aimed at investigating the barriers to such risk management and the possibilities to overcome them. A questionnaire was distributed to ٣٢٤ heads and members of crisis, emergency, disaster, health and environment management committees at the educational directorate and school levels. The findings suggested some of the suggested procedures to face the barriers, such as the need to have the risk management unit governed by a clear legal

and formal framework, to have decisions and regulations concerning its structure and its roles, and to have financial and human resources that would enable the unit to be effective in implementing awareness and risk management plans. The research also emphasized the need to incentivize personnel in the risk unit with financial rewards and to ban their transfer to other locations unless to comparable units. It also suggested ongoing training on emergency situations and the most effective manner of dealing with such situations, as well as having a time-bound action plan that is specific in detailing roles and responsibilities in risk management and the need for an appropriate administrative mechanism that will clarify roles.

٢,١٢,٥ Jaber Al-Bedir (٢٠٢٤), titled *The Impact of Governance and Its Role in Institutional Excellence: A Case Study of Halwani Brothers*

This study looked at how governance affects a company's success, using Halwani Brothers as an example. They wanted to understand what governance really means—its principles and why it matters. They also explored how modern governance practices can help organizations perform better.

To gather data, they sent out online surveys to ٣٠٠ employees and used SPSS to analyze the responses. The results showed that good governance really does make a difference. When employees are included in planning for the future and receive regular training, it helps the company excel. Fair promotion and reward systems also play a big part—they encourage people to grow and come up with new ideas.

Another interesting finding was that strong governance makes it easier to attract talented people. It seems like when a company is well-run, people want to be part of it.

٢,١٢,٦ Zdayriyah & Kalaa (٢٠٢٢), titled *The Role of Governance in Financial Risk Management: A Case Study of the National Bank of Algeria – Branch 483 Tebessa*

This research looked into how well governance works for managing financial risks at a specific branch of the National Bank of Algeria. We wanted to see how applying governance principles actually affects the way financial risks are handled. To do this, we started by going over some important ideas related to governance and risk management. Then, we handed out a survey to get input from people involved. We used the responses to run some statistical tests and check whether our initial ideas held up. The approach combined description and analysis. What we found was pretty clear—there's a strong link between using good governance practices and managing financial risks effectively. It seems like sticking to those principles really does help the bank perform better in this area.

٢,١٣ Commentary on Previous Studies

٢,١٣,١ The article by **Zdayriyah & Kalaa (٢٠٢٢)** presented a local application (Algeria) that confirmed a positive relationship between governance and financial risk management. However, the absence of an official academic reference raises concerns about its dependability as a strong academic source, and thus should be noted as an example to confirm findings; it would be wise to verify its authenticity or replace it with other publications that document similar findings.

٢,١٣,٢ Khurshid **(٢٠٢٣)** study, which has been confirmed to be **Ahmed (٢٠٢٣)**, emphasized practical and applied aspects in a banking setting (Kurdistan Region) and revealed existing real organizational and administrative barriers like non-compliant officers to see accountants' reports teams. It suggests that GRC failure is not due to lacking necessary tools but due to weak institutionalization of GRC (e.g., lack of buy-in

from management). This study is of significant utility for researchers and practitioners engaging in these practical issues of implementation sameness.

٢,١٣,٣ In an entirely new context, **Bdeir's (٢٠٢٣)** article discussed risk management in public education, a sector rarely analyzed in the GRC literature, thus extending the concepts of GRC into the non-profit and service sectors. It offered pragmatic suggestions such as legally structuring risk units, financial incentives, and continuous training, which can apply to different sectors.

٢,١٣,٤ **Jaber Al-Bdeir's (٢٠٢٤)** article represented a successful applied model of governance and institutional excellence in a private company (Halwani Bros.) and provided empirical evidence that employee engagement, fairness, and training were the reasons for success. This article confirmed the idea that governance is not simply a set of leading policies, but a culture within the organization that impacts the ability to attract talented people and promote innovation.

٢,١٣,٥ Prior studies indicate a meaningful diversity in research approaches and frameworks in relation to Governance, Risk, and Compliance (GRC) and risk management within both banking and institutional contexts, reflecting the discipline's maturity from mere compliance tools to a strategic driver of performance and value. **Polu's (٢٠٢٥)** study evidences a qualitative step toward digital transformation, as it links Artificial Intelligence with the SAP ERP system as a mechanism to improve efficiency in risk management and compliance. This is a modern and innovative approach, particularly given the increasing complexity of regulatory requirements. The study demonstrated clear quantitative results (e.g., ٤٥٪ reduction in response time and ٣٧٪ increase in accuracy), which allowed for the robust development of any research premised around technology transformation in GRC.

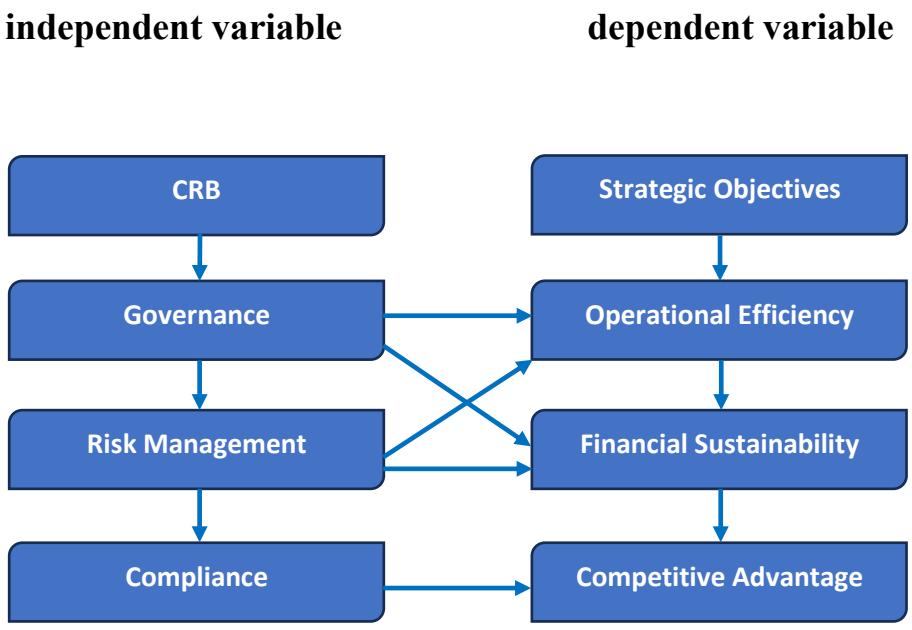
٢,١٣,٦ On the other side of the coin, **Afriyani et al. (٢٠٢٥)** had a strategic and holistic view of GRC, connecting it to intellectual capital, performance, and market value. This broadens the view of GRC as an oversight function to being a strategic value mechanism. Afriyani et al. (٢٠٢٥) offers an essential theoretical link between strategic and financial management on one hand and risk governance on the other hand; it addressed a central void in the literature (i.e., creating linkages between abstract constructs such as intellectual capital and observable constructs such as ROE and ROA).

٢,١٤ Research Gap

Even though there's a lot of research out there on GRC governance, risk, and compliance we still don't fully get how it all fits together in the real world. Most studies look at governance, risk, and compliance as separate things, especially when it comes to different kinds of banks, like conventional ones and Islamic banks. That kind of narrow focus misses the bigger picture how these pieces actually work together to help organizations innovate, stay sustainable, and grow over time.

We also know that GRC can affect financial performance, but there's not enough solid proof showing exactly how flexible GRC frameworks lead to specific goals. Things like dealing with new cyber threats, building trust with stakeholders, or meeting environmental and social standards we're still figuring out how GRC really makes a difference there.

٢,١٥ Research Model



(Prepared by the researcher)

CHAPTER THREE

METHODOLOGY

٣،١ Introduction:

This chapter deals with the field study by identifying the methodology used in the study, the study population and sample, the statistical methods used in the study, and the study tool used, which is the electronic questionnaire form and calculating the validity and reliability of the study tool**.**

٣،٢ Study Population and Sample size:

The study population consists of Employees of Saudi commercial banks and as a result of the difficulty of conducting a comprehensive inventory of all members of the study community; the study used the sampling method by selecting a simple random sample of these Employees of Saudi commercial banks and the study distributed the link on social networking sites, e-mail and the means of communication used by Employees of Saudi commercial banks and the answered the questionnaire was **(٣٦١)** individuals

Sample size: The study sample consists of ٣٨٣ subjects according to this equation.

$$n. = \frac{Z^{٢} \quad Pq}{e^{٢}}$$

- n. is the sample size.

- e is the desired level of precision.

- p is the estimated proportion of an attribute that is present in the population.

- q is ١-p

- The value for Z is found in statistical tables which contain the area under the normal curve.

e = ٠,٠٥

p= ٠,٥

q= ٠,٥

z= ١,٩٦

The minimum sample size is (٣٨٣)
But, the researcher only able to reach (٣٦١) participants, so the response rate was (٩٤,٣%).

٣,٣ Data Collection and Data Collection Tools:

An online questionnaire was developed for data collection, the questionnaire covered two parts; Part one includes demographic characteristics of the participants, while part two covered questions associated to the study topic such as The Relationship between Governance, Risk Management, and Compliance (GRC) and the Achievement of Strategic Objectives. The questionnaire has first been prepared in English and after being approved by the supervisor and the required modifications and amendments have been made, it has been translated into Arabic language because all of the participants were Arabic speakers. Finally, after collecting data in the Arabic version questionnaire, it has again been retranslated into English.

The questionnaire consisted of (٩) sections, each containing (٥) statements, which are:

٣,٣,١ **Governance, Risk Management, and Compliance (GRC)**

٣,٣,٢ **Achievement of Strategic**

٣,٣,٣ **regulatory heterogeneity**

٣,٣,٤ **integrated approaches for emerging risks**

٣,٣,٥ **Organizational culture**

٣,٣,٦ **artificial intelligence**

٣,٣,٧ **global regulatory standards**

٣,٣,٨ **financial sustainability and strategic alignment**

٣,٣,٩ Regulatory sandboxes and flexible compliance mechanisms

Likert scale was used to measure the responses of questionnaire, it is shown in Table ٣,١:

Table (٣,١) Likert scale correction method

Scaling	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Weight	٥	٤	٣	٢	١
mean value	٥ – ٤,٢٠	٤,١٩ – ٣,٤	٢,٦٠ – ٣,٣٩	١,٨٠ – ٢,٥٩	١,٧٩ – ١
Level of impact degree	Very High	High	Medium	Low	Very

٣,٤ Validate the study tool

The Governance, Risk Management, and Compliance (GRC)axes:

Table (٣،٢) Correlation phrase Governance, Risk Management, and Compliance (GRC)

Phrases	Correlation coefficient	P-value
Governance, risk management, and compliance (GRC) help understand how effectively an organization manages its risks.	٠,٥٥٣**	٠,٠٠٠
GRC helps identify areas of weakness that need improvement in internal processes.	٠,٧٦٥**	٠,٠٠٠
GRC contributes to improved decision-making and overall organizational performance.	٠,٦٤٧**	٠,٠٠٠
GRC ensures regulatory compliance requirements are met and reduces uncertainty.	٠,٧١٤**	٠,٠٠٠
GRC contributes to lower costs by effectively managing risk.	٠,٦٢٤**	٠,٠٠٠

****. Correlation is significant at the ٠،٠١ level (٢-tailed).**

All correlation for Governance, Risk Management, and Compliance (GRC) axes items was statistically significant in ٠،٠١ and the tool has structural validity.

The Achievement of Strategic axes:

Table (٣،٣) Correlation phrase Achievement of Strategic

Phrases	Correlation coefficient	P-value
Strategic objectives provide flexibility to respond to urgent changes in the business environment.	٠,٦٣٢**	٠,٠٠٠
Strategic objectives are achieved using advanced technology.	٠,٥٢٢**	٠,٠٠٠
Strategic objectives are achieved using innovative methods.	٠,٦٩٣**	٠,٠٠٠
Strategic objectives are aligned without conflict.	٠,٥٤٥**	٠,٠٠٠
Strategic objectives are achieved, contributing to customer satisfaction.	٠,٦٤٨**	٠,٠٠٠

****. Correlation is significant at the ٠،٠١ level (٢-tailed).**

All correlation for Achievement of Strategic axes items was statistically significant in ٠،٠١ and the tool has structural validity.

The regulatory heterogeneity axes:

Table (٣،٤) Correlation phrase regulatory heterogeneity

Phrases	Correlation coefficient	P-value
regulatory heterogeneity enriches the work environment with new ideas and perspectives.	٠,٦٨٢**	٠,٠٠٠
regulatory heterogeneity helps build a positive brand image.	٠,٥٥٦**	٠,٠٠٠
regulatory heterogeneity enables better understanding and meeting the needs of a diverse customer base.	٠,٧٠٦**	٠,٠٠٠
regulatory heterogeneity contributes to attracting the best talent.	٠,٧٣٣**	٠,٠٠٠
regulatory heterogeneity encourages critical thinking and unconventional solutions.	٠,٥٩١**	٠,٠٠٠

****. Correlation is significant at the ٠،٠١ level (٢-tailed).**

All correlation for regulatory heterogeneity axes items was statistically significant in ٠،٠١ and the tool has structural validity.

The integrated approaches for emerging risks axes:

Table (٣،٥) Correlation phrase integrated approaches for emerging risks

Phrases	Correlation coefficient	P-value
integrated approach to emerging risks contributes to establishing a clear governance structure and defining responsibilities.	٠,٦٦٢**	٠,٠٠٠
integrated approach to emerging risks ensures effective communication about risks to all stakeholders.	٠,٥٨٩**	٠,٠٠٠
integrated approach to emerging risks continuously monitors risks and continuously improves the risk management process.	٠,٧٠٥**	٠,٠٠٠
integrated approach to emerging risks contributes to the development and implementation of strategies to control and mitigate risks.	٠,٦٠٨**	٠,٠٠٠
An integrated approach to emerging risks brings all separate risk management practices into a single, coherent framework.	٠,٥٦٩**	٠,٠٠٠

****. Correlation is significant at the ٠،٠١ level (٢-tailed).**

All correlation for integrated approaches for emerging risks axes items was statistically significant in ٠،٠١ and the tool has structural validity.

The Organizational culture risks axes:

Table (٣،٦) Correlation phrase Organizational culture

Phrases	Correlation coefficient	P-value
Organizational culture guides employees and directs their behavior within the workplace.	٠,٦٢٣**	٠,٠٠٠
Organizational culture enhances and increases productivity.	٠,٧٠٩**	٠,٠٠٠
Organizational culture contributes to encouraging creativity and innovation.	٠,٦٨٧**	٠,٠٠٠
Organizational culture influences the ability to attract and retain top talent.	٠,٧٠٢**	٠,٠٠٠
Organizational culture contributes to improved decision-making processes.	٠,٥٩٢**	٠,٠٠٠

****. Correlation is significant at the ٠،٠١ level (٢-tailed).**

All correlation for Organizational culture axes items was statistically significant in ٠،٠١ and the tool has structural validity.

The artificial intelligence axes:

Table (٣،٧) Correlation phrase artificial intelligence

Phrases	Correlation coefficient	P-value
Governance helps prepare for compliance with emerging laws and regulations related to artificial intelligence.	٠,٦٧٥**	٠,٠٠٠
Governance establishes guidelines to ensure that artificial intelligence is used in an ethical and responsible manner.	٠,٥٧٩**	٠,٠٠٠
The use of AI under governance increases the accuracy of risk data.	٠,٦٠٤**	٠,٠٠٠
AI under governance contributes to increased reporting efficiency.	٠,٦١١**	٠,٠٠٠
AI under governance increases the speed of decision-making.	٠,٥٧٥**	٠,٠٠٠

****. Correlation is significant at the ٠،٠١ level (٢-tailed).**

All correlation for artificial intelligence axes items was statistically significant in ٠،٠١ and the tool has structural validity.

The global regulatory standards axes:

Table (٣،٨) Correlation phrase global regulatory standards

Phrases	Correlation coefficient	P-value
The implementation of global regulatory standards (such as Basel III) contributes to lower operating costs.	٠,٧٦٥**	٠,٠٠٠
The implementation of global regulatory standards (such as Basel III) contributes to more efficient compliance.	٠,٦٧١**	٠,٠٠٠
The implementation of global regulatory standards (such as Basel III) provides mechanisms for assessing and managing market risks.	٠,٧٠٤**	٠,٠٠٠
The implementation of global regulatory standards (such as Basel III) protects the financial system from future crises.	٠,٥٩٢**	٠,٠٠٠
The implementation of global regulatory standards (such as Basel III) contributes to providing regular and transparent disclosures to the public.	٠,٦٢٧**	٠,٠٠٠

****. Correlation is significant at the ٠،٠١ level (٢-tailed).**

All correlation for global regulatory standards axes items was statistically significant in ٠،٠١ and the tool has structural validity.

The financial sustainability and strategic alignment axes:

Table (٣،٩) Correlation phrase financial sustainability and strategic alignment

Phrases	Correlation coefficient	P-value
Financial sustainability works to use resources efficiently to achieve the highest return at the lowest cost.	٠,٦٠٨**	٠,٠٠٠
Financial sustainability contributes to developing financial strategies aimed at achieving long-term sustainability.	٠,٦٠٩**	٠,٠٠٠
Financial sustainability creates multiple ways to generate revenue.	٠,٧٣٣**	٠,٠٠٠
Financial sustainability increases the ability to adapt to economic and financial changes.	٠,٥٦١**	٠,٠٠٠
Financial sustainability enables the provision of transparent and reliable financial reports.	٠,٦٩٢**	٠,٠٠٠

****. Correlation is significant at the ٠،٠١ level (٢-tailed).**

All correlation for financial sustainability and strategic alignment axes items was statistically significant in ٠،٠١ and the tool has structural validity.

The Regulatory sandboxes and flexible compliance mechanisms axes:

Table (٣،١٠) Correlation phrase Regulatory sandboxes and flexible compliance mechanisms

Phrases	Correlation coefficient	P-value
Regulatory sandboxes and flexible compliance mechanisms allow for evaluating the effectiveness of existing compliance programs and making informed decisions about necessary improvements or modifications.	٠,٥٨١**	٠,٠٠٠
Regulatory sandboxes and flexible compliance mechanisms contribute to responding quickly to frequent regulatory changes.	٠,٦٧٨**	٠,٠٠٠
Regulatory sandboxes and flexible compliance mechanisms allow for better keeping pace with changing regulations, especially as they become increasingly complex and stringent.	٠,٦٩٤**	٠,٠٠٠
Regulatory sandboxes and flexible compliance mechanisms enhance the confidence of customers, investors, and regulators in the integrity and ethics of an organization.	٠,٧٢٢**	٠,٠٠٠
Regulatory sandboxes and flexible compliance mechanisms contribute to protecting both tangible and intangible assets.	٠,٦٤١**	٠,٠٠٠

****. Correlation is significant at the ٠،٠١ level (٢-tailed).**

All correlation for Regulatory sandboxes and flexible compliance mechanisms axes items was statistically significant in ٠،٠١ and the tool has structural validity.

٣,٥ Reliability Test:

The reliability of the questionnaire was verified by the analysis of the Alpha Cronbach coefficient, and the results for each of the dimensions of the questionnaire are shown in table ٣,١١:

Table (٣,١١) Reliability questionnaire

dimension	Alpha Cronbach	number of elements
Governance, Risk Management, and Compliance (GRC)	٠,٧٧٨	٥
Achievement of Strategic	٠,٧٧٥	٥
regulatory heterogeneity	٠,٧٦٥	٥
integrated approaches for emerging risks	٠,٧١٧	٥
Organizational culture	٠,٧٨٠	٥
artificial intelligence	٠,٧٧٥	٥
global regulatory standards	٠,٧٩٨	٥
financial sustainability and strategic alignment	٠,٧٢٩	٥
Regulatory sandboxes and flexible compliance mechanisms	٠,٧٨٣	٥
Total questionnaire	٠,٩٣٥	٤٥

The value of Cronbach alpha for all study tool is high and the study tool is high Reliability.

٣,٦ Study Procedures and Steps:

In compliance with the limits of the study, and to answer its questions, the researcher followed the following procedural steps:

٣,٦,١ Addressing the university officially; to obtain a letter facilitating the task of applying the tool to the study sample.

٣,٦,٢ Many studies and previous research on the subject of the current study were reviewed, whether Arab or foreign.

٣,٦,٣ The study tool "the questionnaire" was identified and prepared, which contains (٤٥) paragraphs distributed over Nine main variables.

٣,٦,٤ The study tool was presented to a group of experts and arbitrators; to ensure their validity and suitability for the study questions, and to achieve its goals and objectives, and then take the necessary deletion and modification of phrases in the light of their proposals.

٣,٦,٥ The study tool was applied to an exploratory sample of (٣٠) Employees of Saudi Commercial Banks; they were selected in a simple random way from the original community for the study, during the first academic semester of the academic year.(٢٠٢٥-٢٠٢٦)

٣,٦,٦ After verifying the validity and stability of the study tool, the researcher distributed the questionnaires to Employees of Saudi Commercial Banks, through indirect electronic distribution via the Google Drive link.

٣,٦,٧ The results were monitored, analyzed and interpreted logically.

٣,٦,٨ Recommendations and suggestions for the study were presented.

٣,٧ Statistical Methods:

The research used the SPSS statistical program to analyse the study data through the following statistical methods:

٣,٧,١ Alpha Cronbach coefficient to calculate the level of stability of the study tool.

٣,٧,٢ Pearson correlation coefficient to determine the level of internal consistency and validity of the study tool and to identify the relationship between the study variables.

٣,٧,٣ Ratios and frequencies to describe the characteristics of the study sample

٣,٧,٤ mean and standard deviation to describe the level of response of the study sample individuals to the study tool statements.

٣,٧,٥ Simple linear regression equation to measure the effect between the study variables.

CHAPTER FOUR

DATA ANALYSIS

٤,١ Introduction:

In this chapter, we will address the applied framework of the study by analysing the questionnaire, identifying the characteristics of the study sample, analysing the study's axes, and testing the study's hypotheses in order to achieve the objectives of the study.

٤,٢ Descriptive Statistics:

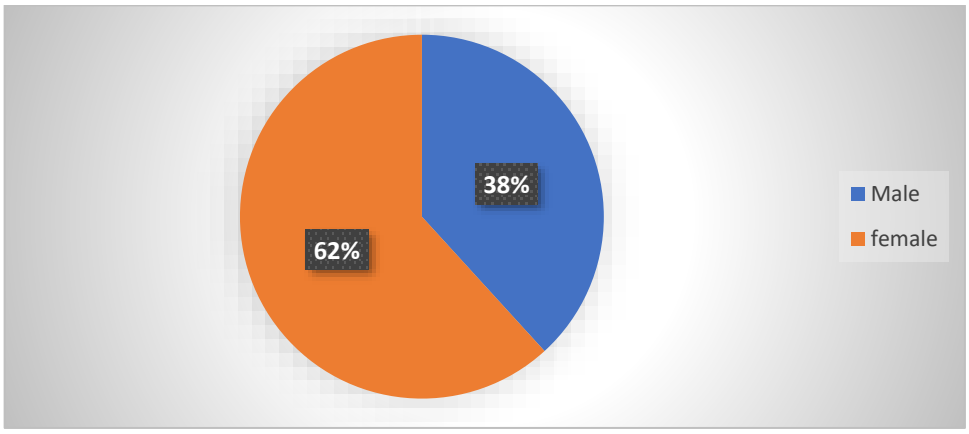
٤,٢,١ Demographic variables:

Gender: The individuals of the study sample were divided into male ٣٨,٢ % and female ٦١,٨% of the study sample, which shows that most of the study sample members are female

Table (٤,١) sample according to gender

Categories	N	%
Male	١٣٨	٣٨,٢
female	٢٢٣	٦١,٨
Total	٣٦١	١٠٠

Figure (٤,١) sample according to gender

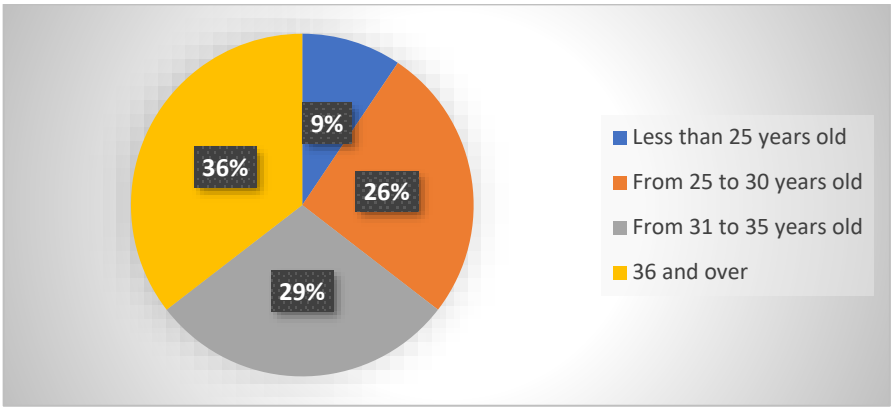


Age: The individuals of the study sample were divided into Less than ٢٥ years old ٩,٤%, From ٢٥to ٣٠ years old ٢٦٪, From ٣١ to ٣٥ years old ٢٩,١ % and ٣٦ years old and over ٣٥,٥٪ which shows that most of the study sample members are ٣٦ years old and over.

Table (٤,٢) sample according to age

Categories	N	%
Less than ٢٥ years old	٣٤	٩,٤
From ٢٥ to ٣٠ years old	٩٤	٢٦,٠
From ٣١ to ٣٥ years old	١٠٥	٢٩,١
٣٦ and over	١٢٨	٣٥,٥
Total	٣٦١	١٠٠

Figure (٤,٢) sample according to age

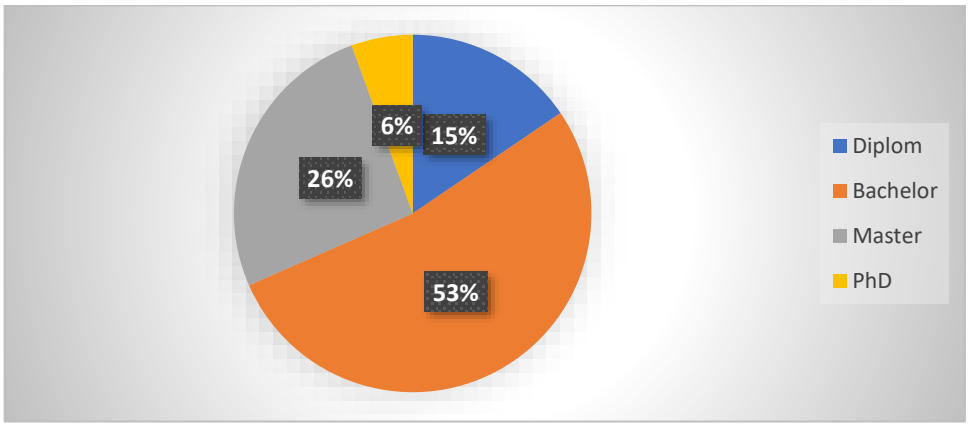


Academic qualification: The individuals of the study sample were divided into Diplom ١٥,٥ %, Bachelor ٥٢,٩ %, Master ٢٦ %, and PhD ٥,٥ % which shows that most of the study sample members are Bachelor

Table (٤,٣) sample according to Academic qualification

Categories	N	%
Diplom	٥٦	١٥,٥
Bachelor	١٩١	٥٢,٩
Master	٩٤	٢٦,٠
PhD	٢٠	٥,٥
Total	٣٦١	١٠٠

Figure (٤,٣) sample according to Academic qualification

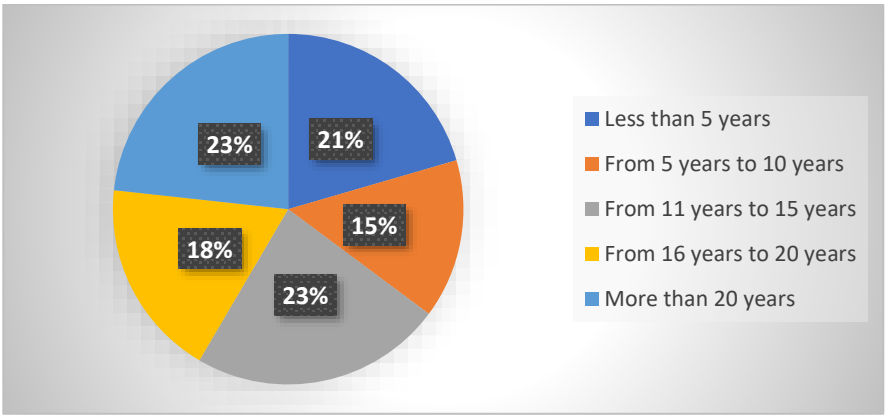


Duration of work experience: The individuals of the study sample were divided into Less than ٥ year ٢٠,٥ %, From ٥ years to ١٠ years ١٤,٧٪, From ١١ years to ١٦ years ٢٣,٣٪, from ١٦ years to ٢٠ years ١٨,٣ % and more than ٢٠ years ٢٣,٣٪ which shows that most of the study sample members are from ١١ years to ١٥ years and more than ٢٠ years

Table (٤,٤) sample according to Duration of work experience

Categories	N	%
Less than ٥ years	٧٤	٢٠,٥
From ٥ years to ١٠ years	٥٣	١٤,٧
From ١١ years to ١٥ years	٨٤	٢٣,٣
From ١٦ years to ٢٠ years	٦٦	١٨,٣
More than ٢٠ years	٨٤	٢٣,٣
Total	٣٦١	١٠٠

Figure (٤,٤) sample according to Duration of work experience

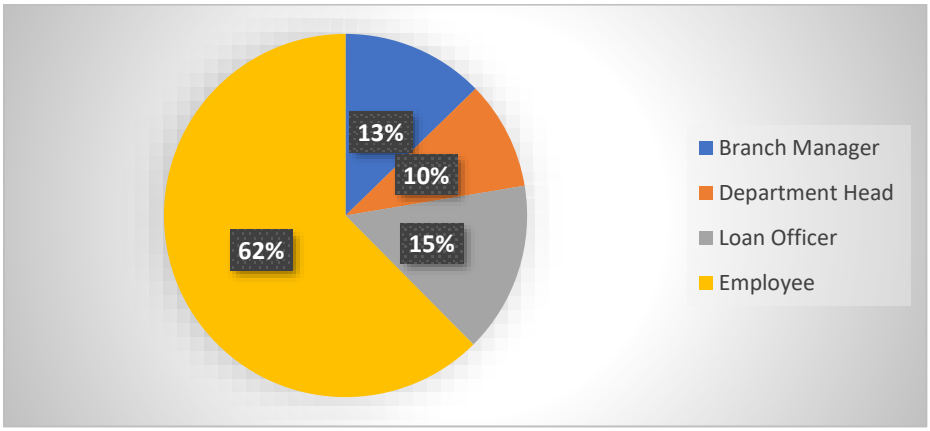


- **job**: The individuals of the study sample were divided into Branch Manager ١٢,٧ %, Department Head ٩,٧٪, Loan Officer ١٥,٢٪, Employee ٦٢,٦٪ which shows that most of the study sample members are Employee

Table (٤,٥) sample according to job

Categories	N	%
Branch Manager	٤٦	١٢,٧
Department Head	٣٥	٩,٧
Loan Officer	٥٥	١٥,٢
Employee	٢٢٦	٦٢,٦
Total	٣٦١	١٠٠

Figure (٤,٥) sample according to job



٤,٢,٢ The variables of study

٤,٢,٢,١ The Governance, Risk Management, and Compliance (GRC) axes:

Table (٤,٦) Phrases of the Governance, Risk Management, and Compliance (GRC) axes

N.	Phrase	Mean	S. D	Degree	Arrangement
١	Governance, risk management, and compliance (GRC) help understand how effectively an organization manages its risks.	٣,٨٥	١,١٧	High	٤
٢	GRC helps identify areas of weakness that need improvement in internal processes.	٣,٨٣	١,١٣	High	٥
٣	GRC contributes to improved decision-making and overall organizational performance.	٣,٩٤	١,١٧	High	٢
٤	GRC ensures regulatory compliance requirements are met and reduces uncertainty.	٣,٨٥	١,٠٦	High	٣
٥	GRC contributes to lower costs by effectively managing risk.	٤,٠١	٠,٩٩	High	١

The phrases of the Governance, Risk Management, and Compliance (GRC) were arranged in terms of the degree of relative importance. It was found that the phrase (GRC contributes to lower costs by effectively managing risk) is the most important phrase with a value of ٤,٠١ and a standard deviation of ٠,٩٩ and high degree of agreement

While the phrase (GRC helps identify areas of weakness that need improvement in internal processes) was the least important phrase with a value of ٣.٨٣ and a standard deviation of ١,١٣ and a high degree of agreement

When studying the phrases of the Governance, Risk Management, and Compliance (GRC), it was found all expression in Governance, Risk Management, and Compliance (GRC) was high, which shows the high level of the Governance, Risk Management, and Compliance (GRC), where the mean is ٣,٩٠ and the S.D. is ١,١١.

٤,٢,٢,٢ The Achievement of Strategic axes:

Table (٤,٧) Phrases of the Achievement of Strategic axes

N.	Phrase	Mean	S. D	Degree	Arrangement
١	**Strategic objectives provide flexibility to respond to urgent changes in the business environment.**	٣,٩٨	١,٠٩	**High**	٣
٢	**Strategic objectives are achieved using advanced technology.**	٣,٩٩	١,٠٧	**High**	١
٣	**Strategic objectives are achieved using innovative methods.**	٣,٨٧	١,٠٩	**High**	٤
٤	**Strategic objectives are aligned without conflict.**	٣,٨٦	١,٠٧	**High**	٥
٥	**Strategic objectives are achieved, contributing to customer satisfaction.**	٣,٩٨	١,٠٥	**High**	٢

The phrases of the Achievement of Strategic were arranged in terms of the degree of relative importance. It was found that the phrase (Strategic objectives are achieved using advanced technology) is the most important phrase with a value of ٣,٩٩ and a standard deviation of ١,٠٧ and high degree of agreement

While the phrase (Strategic objectives are aligned without conflict.) was the least important phrase with a value of ٣,٨٦ and a standard deviation of ١,٠٧ and a high degree of agreement

When studying the phrases of the Achievement of Strategic, it was found all expression in Achievement of Strategic was high, which shows the high level of the Achievement of Strategic, where the mean is ٣,٩٣ and the S.D. is ١,٠٧

٤,٢,٢,٣ The regulatory heterogeneity axes:

Table (٤,٨) Phrases of the regulatory heterogeneity axes

N.	Phrase	Mean	S. D	Degree	Arrangement
١	**regulatory heterogeneity enriches the work environment with new ideas and perspectives.**	٣,٩٣	١,١١	**High**	٣
٢	**regulatory heterogeneity helps build a positive brand image.**	٣,٨٨	١,١٣	**High**	٤
٣	**regulatory heterogeneity enables better understanding and meeting the needs of a diverse customer base.**	٤,٠٦	١,٠٠	**High**	١
٤	**regulatory heterogeneity contributes to attracting the best talent.**	٣,٧٦	١,٢٥	**High**	٥
٥	**regulatory heterogeneity encourages critical thinking and unconventional solutions.**	٤,٠١	١,٠٤	**High**	٢

The phrases of the Achievement of Strategic were arranged in terms of the degree of relative importance. It was found that the phrase (regulatory heterogeneity enables better understanding and meeting the needs of a diverse customer base) is the most important phrase with a value of ٤,٠٦ and a standard deviation of ١,٠٠ and high degree of agreement

While the phrase (regulatory heterogeneity contributes to attracting the best talent.) was the least important phrase with a value of ٣,٧٦ and a standard deviation of ١,٢٥ and a high degree of agreement

When studying the phrases of the regulatory heterogeneity, it was found all expression in regulatory heterogeneity was high, which shows the high level of the regulatory heterogeneity, where the mean is ٣,٩٣ and the S.D. is ١,١١.

٤,٢,٢,٤ The integrated approaches for emerging risks axes:

Table (٤,٩) Phrases of the integrated approaches for emerging risks axes

N.	Phrase	Mean	S. D	Degree	Arrangement
١	**integrated approach to emerging risks contributes to establishing a clear governance structure and defining responsibilities.**	٣,٨٩	١,١٢	**High**	٢
٢	**integrated approach to emerging risks ensures effective communication about risks to all stakeholders.**	٣,٨٨	١,١٦	**High**	٤
٣	**integrated approach to emerging risks continuously monitors risks and continuously improves the risk management process.**	٣,٨٠	١,١٧	**High**	٥
٤	**integrated approach to emerging risks contributes to the development and implementation of strategies to control and mitigate risks.**	٣,٨٨	١,١١	**High**	٣
٥	**An integrated approach to emerging risks brings all separate risk management practices into a single, coherent framework.**	٣,٩٦	٠,٩٩	**High**	١

The phrases of the integrated approaches for emerging risks were arranged in terms of the degree of relative importance. It was found that the phrase (An integrated approach to emerging risks brings all separate risk management practices into a single, coherent framework) is the most important phrase with a value of ٣,٩٦ and a standard deviation of ٠,٩٩ and high degree of agreement

While the phrase (integrated approach to emerging risks continuously monitors risks and continuously improves the risk management process.) was the least important phrase with a value of ٣,٨٩ and a standard deviation of ١,١٢ and a high degree of agreement

When studying the phrases of the integrated approaches for emerging risks, it was found all expression in integrated approaches for emerging risks was high, which shows the high level of the integrated approaches for emerging risks, where the mean is ٣,٨٨ and the S.D. is ١,١١.

٤,٢,٢,٥ The Organizational culture axes:

Table (٤,١٠) Phrases of the Organizational culture axes

N.	Phrase	Mean	S. D	Degree	Arrangement
١	**Organizational culture guides employees and directs their behavior within the workplace.**	٤,٠٨	١,٠٢	**High**	١
٢	**Organizational culture enhances and increases productivity.**	٣,٩٩	١,٠٦	**High**	٢
٣	**Organizational culture contributes to encouraging creativity and innovation.**	٣,٩٢	١,١٢	**High**	٣
٤	**Organizational culture influences the ability to attract and retain top talent.**	٣,٨٥	١,١٥	**High**	٥
٥	**Organizational culture contributes to improved decision-making processes.**	٣,٨٦	١,١٣	**High**	٤

The phrases of the Organizational culture were arranged in terms of the degree of relative importance. It was found that the phrase (Organizational culture guides employees and directs their behavior within the workplace) is the most important phrase with a value of ٤,٠٨ and a standard deviation of ١,٠٢ and high degree of agreement

While the phrase (Organizational culture influences the ability to attract and retain top talent) was the least important phrase with a value of ٣,٨٥ and a standard deviation of ١,١٥ and a high degree of agreement

When studying the phrases of the Organizational culture, it was found all expression in Organizational culture was high, which shows the high level of the Organizational culture, where the mean is ٣,٩٤ and the S.D. is ١,١٠

٤,٢,٢,٦ The artificial intelligence axes:

Table (٤,١١) Phrases of the artificial intelligence axes

N.	Phrase	Mean	S. D	Degree	Arrangement
١	**Governance helps prepare for compliance with emerging laws and regulations related to artificial intelligence.**	٣,٩٣	١,٠٥	**High**	١
٢	**Governance establishes guidelines to ensure that artificial intelligence is used in an ethical and responsible manner.**	٣,٨٩	١,٠٧	**High**	٣
٣	**The use of AI under governance increases the accuracy of risk data.**	٣,٨٤	١,١٠	**High**	٥
٤	**AI under governance contributes to increased reporting efficiency.**	٣,٩١	١,٠٨	**High**	٢
٥	**AI under governance increases the speed of decision-making.**	٣,٨٧	١,١٣	**High**	٤

The phrases of the artificial intelligence were arranged in terms of the degree of relative importance. It was found that the phrase (Governance helps prepare for compliance with emerging laws and regulations related to artificial intelligence.) is the most important phrase with a value of ٣,٩٣ and a standard deviation of ١,٠٥ and high degree of agreement

While the phrase (The use of AI under governance increases the accuracy of risk data) was the least important phrase with a value of ٣,٨٤ and a standard deviation of ١,١٠ and a high degree of agreement

When studying the phrases of the artificial intelligence, it was found all expression in artificial intelligence was high, which shows the high level of the artificial intelligence, where the mean is ٣,٨٩ and the S.D. is ١,٠٩.

٤,٢,٢,٧ The global regulatory standards axe:

Table (٤,١٢) Phrases of the global regulatory standards axes

N.	Phrase	Mean	S. D	Degree	Arrangement
١	**The implementation of global regulatory standards (such as Basel III) contributes to lower operating costs.**	٣,٨١	١,١٤	**High**	٣
٢	**The implementation of global regulatory standards (such as Basel III) contributes to more efficient compliance.**	٣,٨١	١,١٧	**High**	٤
٣	**The implementation of global regulatory standards (such as Basel III) provides mechanisms for assessing and managing market risks.**	٣,٧٦	١,٢٠	**High**	٥
٤	**The implementation of global regulatory standards (such as Basel III) protects the financial system from future crises.**	٣,٩٤	١,٠٥	**High**	١
٥	**The implementation of global regulatory standards (such as Basel III) contributes to providing regular and transparent disclosures to the public.**	٣,٩١	١,٠٧	**High**	٢

The phrases of the global regulatory standards were arranged in terms of the degree of relative importance. It was found that the phrase (The implementation of global regulatory standards (such as Basel III) protects the financial system from future crises.) is the most important phrase with a value of ٣,٩٣ and a standard deviation of ١,٠٥ and high degree of agreement

While the phrase (The implementation of global regulatory standards (such as Basel III) provides mechanisms for assessing and managing market risks.) was the least important phrase with a value of ٣,٨٤ and a standard deviation of ١,١٠ and a high degree of agreement

When studying the phrases of the global regulatory standards, it was found all expression in global regulatory standards was high, which shows the high level of the global regulatory standards, where the mean is ٣,٨٤ and the S.D. is ١,١٣.

٤,٢,٢,٨ The financial sustainability and strategic alignment axe:

Table (٤,١٣) Phrases of the financial sustainability and strategic alignment axes

N.	Phrase	Mean	S. D	Degree	Arrangement
١	**Financial sustainability works to use resources efficiently to achieve the highest return at the lowest cost.**	٣,٨٩	١,١٠	**High**	٥
٢	**Financial sustainability contributes to developing financial strategies aimed at achieving long-term sustainability.**	٣,٩٧	١,٠٩	**High**	٤
٣	**Financial sustainability creates multiple ways to generate revenue.**	٤,٠١	١,٠١	**High**	٣
٤	**Financial sustainability increases the ability to adapt to economic and financial changes.**	٤,٠٥	١,٠٤	**High**	٢
٥	**Financial sustainability enables the provision of transparent and reliable financial reports.**	٤,٠٦	١,٠٥	**High**	١

The phrases of the financial sustainability and strategic alignment were arranged in terms of the degree of relative importance. It was found that the phrase (Financial sustainability enables the provision of transparent and reliable financial reports) is the most important phrase with a value of ٤,٠٦ and a standard deviation of ١,٠٥ and high degree of agreement

While the phrase (Financial sustainability works to use resources efficiently to achieve the highest return at the lowest cost) provides mechanisms for assessing and managing market risks.) was the least important phrase with a value of ٣,٨٩ and a standard deviation of ١,١٠ and a high degree of agreement

When studying the phrases of the financial sustainability and strategic alignment, it was found all expression in financial sustainability and strategic alignment was high, which shows the high level of the financial sustainability and strategic alignment, where the mean is ٤,٠٠ and the S.D. is ١,٠٦.

٤,٢,٢,٩ The Regulatory sandboxes and flexible compliance mechanisms axe:

Table (٤,١٤) Phrases of the Regulatory sandboxes and flexible compliance mechanisms Axes

N.	Phrase	Mean	S. D	Degree	Arrangement
١	**Regulatory sandboxes and flexible compliance mechanisms allow for evaluating the effectiveness of existing compliance programs and making informed decisions about necessary improvements or modifications.**	٣,٨٦	١,١٥	**High**	٥
٢	**Regulatory sandboxes and flexible compliance mechanisms contribute to responding quickly to frequent regulatory changes.**	٣,٩١	١,٠٩	**High**	٣
٣	**Regulatory sandboxes and flexible compliance mechanisms allow for better keeping pace with changing regulations, especially as they become increasingly complex and stringent.**	٣,٩٥	١,٠٦	**High**	١
٤	**Regulatory sandboxes and flexible compliance mechanisms enhance the confidence of customers, investors, and regulators in the integrity and ethics of an organization.**	٣,٩٤	١,٠٥	**High**	٢
٥	**Regulatory sandboxes and flexible compliance mechanisms contribute to protecting both tangible and intangible assets.**	٣,٨٨	١,٠٩	**High**	٤

The phrases of the Regulatory sandboxes and flexible compliance mechanisms were arranged in terms of the degree of relative importance. It was found that the phrase (Regulatory sandboxes and flexible compliance mechanisms allow for better keeping pace with changing regulations, especially as they become increasingly complex and stringent.) is the most important phrase with a value of ٣,٩٥ and a standard deviation of ١,٠٦ and high degree of agreement

While the phrase (Regulatory sandboxes and flexible compliance mechanisms allow for evaluating the effectiveness of existing compliance programs and making informed decisions about necessary improvements or modifications.) was the least important phrase with a value of ٣,٨٦ and a standard deviation of ١,١٥ and a high degree of agreement

When studying the phrases of the f Regulatory sandboxes and flexible compliance mechanisms, it was found all expression in Regulatory sandboxes and flexible compliance mechanisms was high, which shows the high level of the Regulatory sandboxes and flexible compliance mechanisms, where the mean is ٣,٩١ and the S.D. is ١,٠٩.

٤,٣ Test Research Hypotheses:

H١: A negative correlation exists between regulatory heterogeneity across jurisdictions and the effectiveness of Governance, Risk, and Compliance (GRC) systems in commercial banks in the Kingdom of Saudi Arabia, with adaptive compliance strategies substantially reducing this negative correlation.

Table (٤,١٥) Testing the first hypothesis

B	T	r	F	P-VALUE
– ٠,٢٨٧	- ٦,١٠٥**	- ٠,٣٠٧	**٣٧,٢٦٧	٠,٠٠٠

in Table (٤,١٥) indicate that the simple regression model is statistically significant at the ($\alpha \leq$ ٠,٠١) level, confirming the suitability of the model in explaining the relationship between the study variables. The findings show a statistically significant negative effect of the effectiveness of Governance, Risk, and Compliance (GRC) frameworks on

regulatory heterogeneity across jurisdictions, as evidenced by the negative regression coefficient (B = – ٠,٢٨٧, p < ٠,٠١) and the negative correlation coefficient (r = – ٠,٣٠٧).

This result confirms the acceptance of the alternative hypothesis (H١), which states that there is a significant relationship between regulatory heterogeneity and GRC effectiveness in Saudi commercial banks.

The negative direction of the relationship suggests that improving the maturity and effectiveness of GRC systems by ١٪ contributes to reducing regulatory heterogeneity by approximately ٠,٢٨٧٪. This indicates that banks with well-structured GRC frameworks are more capable of managing variations in regulatory requirements through unified internal policies, stronger governance mechanisms, and adaptive compliance practices. Accordingly, such systems help reduce regulatory inconsistencies and mitigate the challenges associated with diverse regulatory expectations.

H٢: Banks utilizing integrated approaches for emerging risks (cybersecurity, climate-related financial risks, digital transformation) achieve statistically higher GRC effectiveness (as measured by the predefined key performance indicator [KPI] for GRC effectiveness) compared to banks utilizing traditional approaches to risk management.

Table (٤,١٦) Testing the second hypothesis

B	T	r	F	P-VALUE
٠,٣٣٧	**٦,٥٩٢	٠,٣٢٩	**٤٣,٤٥٥	٠,٠٠٠

In table (٤,١٦) The simple regression equation was significant at the level of ٠,٠١and There is a statistically significant positive impact of the integrated approaches for emerging risks on the Governance, Risk, and Compliance (GRC) at ٠,٠١ and positive correlation integrated approaches for emerging risks and the effectiveness of Governance, Risk, and Compliance (GRC) systems in commercial banks in the Kingdom of Saudi

Arabia at ٠,٠١, Which indicates the correct of the second hypothesis and, it turned out that the more it increased integrated approaches for emerging risks level ١٪ is the the effectiveness of Governance, Risk, and Compliance (GRC) has increased ٠,٣٣٧٪

H٣: There is a strong positive causal relationship between the maturity of the GRC framework implementation and the attainment of strategic goals; financial performance and non-financial sustainability performance improve with greater GRC maturity.

Table (٤,١٧) Testing the third hypothesis

B	T	r	F	P-VALUE
٠,٢٨١	**٦,١٨٢	٠,٣١٠	**٣٨,٢١٦	٠,٠٠٠

In table (٤,١٧) The simple regression equation was significant at the level of ٠,٠١and There is a statistically significant positive impact of the Governance, Risk, and Compliance (GRC) on the Achievement of Strategic at ٠,٠١ and positive correlation between Governance, Risk, and Compliance (GRC) and the Achievement at ٠,٠١, Which indicates the correct of the third hypothesis and, it turned out that the more it increased Governance, Risk, and Compliance (GRC) level ١٪ is the the Achievement of Strategic has increased ٠,٢٨١٪

H٤: Organizational culture and strong internal governance structures (e.g., board oversight and risk committees) increase the effectiveness of GRC frameworks in delivering long-term strategic objectives, as measured by declining compliance violations and rising strategic alignment metrics.

Table (٤,١٨) Testing the fourth hypothesis

B	T	r	F	P-VALUE
٠,٢٥٣	**٤,٩١٨	٠,٢٥١	**٢٤,١٨٤	٠,٠٠٠

In table (٤,١٨) The simple regression equation was significant at the level of ٠,٠١and There is a statistically significant positive impact of the Organizational culture on the effectiveness of Governance, Risk, and Compliance (GRC) at ٠,٠١ and positive correlation between Organizational culture and the effectiveness of Governance, Risk, and Compliance (GRC) at ٠,٠١, Which indicates the correct of the fourth hypothesis and, it turned out that the more it increased Organizational culture level ١٪ is the the effectiveness of Governance, Risk, and Compliance (GRC) has increased ٠,٢٥٣٪

H٥: The enhanced use of artificial intelligence and advanced analytics in GRC frameworks results in measurable improvements in the accuracy of risk data, the efficiency of reporting, and the speed of decision making, notwithstanding some technical and regulatory implementation issues.

Table (٤,١٩) Testing the fifth hypothesis

B	T	r	F	P-VALUE
٠,٢٩٧	**٥,٤٤٩	٠,٢٧٦	**٢٩,٦٨٧	٠,٠٠٠

In table (٤,١٩) The simple regression equation was significant at the level of ٠,٠١and There is a statistically significant positive impact of the artificial intelligence on the effectiveness of Governance, Risk, and Compliance (GRC) at ٠,٠١ and positive correlation between artificial intelligence and the effectiveness of Governance, Risk, and Compliance (GRC) at ٠,٠١, Which indicates the correct of the fifth hypothesis and, it turned out that the more it increased artificial intelligence level ١٪ is the the effectiveness of Governance, Risk, and Compliance (GRC) has increased ٠,٢٩٧%

H٦: The improved alignment of global regulatory standards (e.g., Basel III) and local compliance requirements through structured frameworks leads to significantly lower operational costs and higher compliance effectiveness compared to approaches without improved alignment.

Table (٤,٢٠) Testing the sixth hypothesis

B	T	r	F	P-VALUE
٠,٢٠٩	**٣,٩٦٢	٠,٢٠٥	**١٥,٧٠٠	٠,٠٠٠

In table (٤,٢٠) The simple regression equation was significant at the level of ٠,٠١and There is a statistically significant positive impact of the global regulatory standards on the effectiveness of Governance, Risk, and Compliance (GRC) at ٠,٠١ and positive correlation between global regulatory standards and the effectiveness of Governance, Risk, and Compliance (GRC) at ٠,٠١, Which indicates the correct of the sixth hypothesis and, it turned out that the more it increased global regulatory standards level ١٪ is the the effectiveness of Governance, Risk, and Compliance (GRC) has increased ٠,٢٠٩%

H٧: GRC actions that employ a designated return on investment (ROI) metrics (such as, reduction in regulatory violations, increase in reputation capital) show statistically significant improvement in financial sustainability and strategic alignment when compared to GRC actions that do not employ a designated ROI metric.

Table (٤,٢١) Testing the seventh hypothesis

B	T	r	F	P-VALUE
٠,١٨٣	**٣,٩٩٨	٠,٢٠٦	**١٥,٩٨٥	٠,٠٠٠

In table (٤,٢١) The simple regression equation was significant at the level of ٠,٠١and There is a statistically significant positive impact of the Governance, Risk, and Compliance (GRC) on the financial sustainability and strategic alignment at ٠,٠١ and positive correlation between Governance, Risk, and Compliance (GRC) and the financial sustainability and strategic alignment at ٠,٠١, Which indicates the correct of the seventh hypothesis and, it turned out that the more it increased Governance, Risk, and Compliance (GRC) level ١٪ is the the financial sustainability and strategic alignment has increased ٠,١٨٣%

H٨: Regulatory sandboxes and flexible compliance mechanisms create sizeable benefits for cross-border GRC implementation challenges, including improved risk management and increased ease of regulatory compliance in multiple jurisdictions.

Table (٤,٢٢) Testing the eighth hypothesis

B	T	r	F	P-VALUE
٠,١٦٥	**٢,٩٣١	٠,١٥٣	**٨,٥٩١	٠,٠٠٤

In table (٤,٢٢) The simple regression equation was significant at the level of ٠,٠١and There is a statistically significant positive impact of the Regulatory sandboxes and flexible compliance mechanisms on the effectiveness of Governance, Risk, and Compliance (GRC) at ٠,٠١ and positive correlation between Regulatory sandboxes and flexible compliance mechanisms and the effectiveness of Governance, Risk, and Compliance (GRC) at ٠,٠١, Which indicates the correct of the eighth hypothesis and, it turned out that the more it increased Regulatory sandboxes and flexible compliance mechanisms level ١٪ is the the effectiveness of Governance, Risk, and Compliance (GRC) has increased ٠,١٦٥%

CHAPTER FIVE

RESULTS AND DISCUSSIONS

٥,١ Introduction:

The section that discusses the results of the study is the most important part of the research, because it states the main contribution of the research, it also includes recommendation for the academic and organization leadership, and then it entails the conclusion of the study which is the last part of this chapter.

٥,٢ Results and Discussion

٥,٢,١ There is a statistically significant negative correlation regulatory heterogeneity across jurisdictions and the effectiveness of Governance, Risk, and Compliance (GRC) systems in commercial banks in the Kingdom of Saudi Arabia at ٠,٠١, Which indicates the correct of the first hypothesis

٥,٢,٢ There is a statistically significant positive impact of the integrated approaches for emerging risks on the Governance, Risk, and Compliance (GRC) at ٠,٠١ Which indicates the correct of the second hypothesis.

٥,٢,٣ There is a statistically significant positive impact of the Governance, Risk, and Compliance (GRC) on the Achievement of Strategic at ٠,٠١ Which indicates the correct of the third hypothesis

٥,٢,٤ There is a statistically significant positive impact of the Organizational culture on the effectiveness of Governance, Risk, and Compliance (GRC) at ٠,٠١ Which indicates the correct of the fourth hypothesis

٥,٢,٥ There is a statistically significant positive impact of the artificial intelligence on the effectiveness of Governance, Risk, and Compliance (GRC) at ٠,٠١ Which indicates the correct of the fifth hypothesis

٥,٢,٦ There is a statistically significant positive impact of the global regulatory standards on the effectiveness of Governance, Risk, and Compliance (GRC) at ٠,٠١ Which indicates the correct of the sixth hypothesis

٥,٢,٧ There is a statistically significant positive impact of the Governance, Risk, and Compliance (GRC) on the financial sustainability and strategic alignment at ٠,٠١ Which indicates the correct of the seventh hypothesis

٥,٢,٨ There is a statistically significant positive impact of the Regulatory sandboxes and flexible compliance mechanisms on the effectiveness of Governance, Risk, and Compliance (GRC) at ٠,٠١ Which indicates the correct of the eighth hypothesis.

٥,٣ Conclusion:

٥,٣,١ There is a negative correlation between regulatory variation across jurisdictions and the effectiveness of GRC (Government, Risk, and Compliance) systems in commercial banks in the Kingdom of Saudi Arabia. Adaptive compliance strategies significantly reduce this negative correlation.

٥,٣,٢ Banks that employ integrated approaches to emerging risks (cybersecurity, climate-related financial risks, and digital transformation) achieve statistically higher GRC effectiveness (as measured by the predefined GRC Key Performance Indicator [KPI]) compared to banks using traditional risk management approaches.

٥,٣,٣ There is a strong positive causal relationship between the maturity of GRC implementation and the achievement of strategic objectives; financial performance and non-financial sustainability performance improve with increasing GRC maturity.

٥,٣,٤ A strong organizational culture and internal governance structures (such as board oversight committees and risk committees) enhance the effectiveness of governance, risk, and compliance (GRC) frameworks in achieving long-term strategic objectives, as measured by lower compliance violations and higher strategic alignment metrics.

٥,٣,٥ The improved use of artificial intelligence (AI) and advanced analytics in GRC frameworks leads to tangible improvements in risk data accuracy, reporting efficiency, and decision-making speed, despite some technical and organizational challenges in implementation.

٥,٣,٦ Improving the alignment of global regulatory standards (such as Basel III) and local compliance requirements through structured frameworks results in significantly lower operating costs and greater compliance effectiveness compared to approaches that do not improve alignment.

٥,٣,٧ GRC actions that utilize customized return on investment (ROI) metrics (such as reduced regulatory violations and increased reputational capital) demonstrate statistically significant improvements in financial sustainability and strategic alignment compared to GRC actions that do not use a customized ROI metric.

٥,٣,٨ Regulatory testing environments and flexible compliance mechanisms deliver significant benefits to the challenges of implementing governance, risk and compliance (GRC) across borders, including improved risk management and increased ease of regulatory compliance in multiple jurisdictions.

٥,٤ Recommendations:

٥,٤,١ Leveraging GRC to identify weaknesses in internal processes that need improvement.

٥,٤,٢ Aligning strategic objectives without conflict.

٥,٤,٣ Leveraging organizational diversity to attract top talent.

٥,٤,٤ Utilizing an integrated approach to emerging risks to continuously monitor and improve their management.

٥,٤,٥ Benefiting from organizational culture to attract and retain top talent.

٥,٤,٦ Utilizing artificial intelligence within a governance framework to enhance the accuracy of risk data

٥,٤,٧ Implementing global regulatory standards (such as Basel III) to provide mechanisms for assessing and managing market risks.

٥,٤,٨ Implementing financial sustainability to ensure efficient resource utilization for maximum return at minimal cost.

٥,٤,٩ Leveraging flexible regulatory testing environments and compliance mechanisms to evaluate the effectiveness of existing compliance programs and make informed decisions regarding necessary improvements or modifications.

REFERENCES:

١. Al-Bdeir, J. (٢٠٢٣). *The impact of governance and its role in institutional excellence: A case study of Halwani Bros*. Egyptian Society for Reading and Knowledge, University of Jeddah, College of Business.

٢. Bdeir, A. (٢٠٢٣). Management of health, environmental, and demographic risks in public education schools (obstacles and ways of addressing them). *Journal of University Performance Development, 24*(١).

٣. Khorsheed, A. (٢٠٢٣). The role of the compliance officer in risk management in banks: An analytical study of a sample of banks in the Kurdistan Region. *Jolitekmk Journal of Humanities and Social Sciences*. Salaheddin University, Erbil, Kurdistan Region, Iraq.

٤. Deloitte. (٢٠٢٣). *GRC in banking: Best practices and strategies*.

٥. Khorshid, A. (٢٠٢٣). Advanced analytics in banking risk management: A meta-analysis of ٢٠٠ case studies. *Journal of Banking & Finance, 145*, Article ١٠٦٦٢١.

٦. Smith, R., et al. (٢٠٢٢). Compliance as a strategic asset: Evidence from ٥٠ global banks. *Journal of Financial Regulation, 17*(٢), ٨٩–١٠٤.

٧. Al-Sulaiman, A., & Al-Harbi, M. (٢٠٢٢). A systematic review of GRC frameworks: Adapting to dynamic business environments. *Journal of Risk Management, 12*(٤), ٧٨–٩٢.

٨. Zdayria, S., & Kelaa, T. (٢٠٢٢). *The role of governance in managing financial risks: A case study of the National Algerian Bank – Agency 483 Tebessa*. University of Larbi Tebessi Tebessa, Faculty of Economic Sciences, Commercial Sciences, and Management Sciences, Department of Finance and Accounting.

٩. Financial Action Task Force (FATF). (٢٠٢١). *Guidance on risk-based approach to money laundering and terrorist financing*.

١٠. Smith, J., & Johnson, M. (٢٠٢١). G(P)RC: How governance, risk, and compliance drive performance in financial services. *Journal of Banking and Finance, 42*(٣), ٢٠١–٢١٥.

١١. Abdel Hafiz Ahmed Qasim, Z., & Rashwan, A. M. S. (٢٠٢٠). The impact of applying mandatory governance rules on risk management. *Arab Journal of Administration, 40*(٣).

١٢. Kumar, S., & Singh, R. (٢٠٢٠). Corporate governance and enterprise-wide risk management in the Indian banking sector. *Journal of Financial Regulation, 15*(٣), ٤٥–٦٠.

١٣. U.S. Department of Justice. (٢٠٢٠, January ٧). *Deutsche Bank agrees to pay $1.4 billion to resolve anti-money laundering and sanctions violations* [Press release].

١٤. World Education News & Reviews (WENR). (٢٠٢٠, April). *Education ...* World Education Services.

١٥. OECD. (٢٠٢٠). *GRC integration in multinational banks: Cross-border regulatory challenges* (OECD Working Papers on Finance, Insurance and Private Pensions, No. ٤٥).

١٦. Zammit, C., Grima, S., & Kizilkaya, Y. M. (٢٠٢١). A maturity evaluation of governance, risk management and compliance (GRC) within the Maltese public sector. *In S. Grima (Ed.), Contemporary issues in public sector accounting and auditing*. Emerald Publishing Limited.

١٧. Adinata, A. S. (٢٠٢٤). *The evaluation of integrated governance, risk, and compliance (GRC) implementation to enhance enterprise risk management (ERM): A case study* [Doctoral dissertation, Universitas Sebelas Maret].

١٨. Victor, A. A., Moronkunbi, M. A., Oyedeji, O. C., Victor, P. O., & Samuel, S. A. (٢٠٢٤). The role of IT governance, risk and compliance (IT GRC) in modern organizations. *International Journal of Business Research*, *122*, ٨٨٩–٩٠١.

١٩. Handoko, B. L., Riantono, I. E., & Gani, E. (٢٠٢٠). Importance and benefit of application of governance risk and compliance principle. *Systematic Reviews in Pharmacy, 11*(٩), ٥١٠–٥١٦.

٢٠. Ayurini, L. W., & Wijayati, N. (٢٠٢٥). Governance, risk, and compliance maturity level: Optimizing XX LLC performance achievement. *International Journal of Financial, Accounting, and Management, 7*(١), ١٥–٢٦.

٢١. Afriyani, N., Kamaliah, K., & Indrawati, N. (٢٠٢٥). The effect of governance, risk, compliance (GRC) and intellectual capital on company value through financial performance. *Golden Ratio of Data in Economics, Business, and Accounting*.

٢٢. Syamsuri, L. M. (٢٠٢٥). A strategic framework for integrated governance, risk, and compliance (GRC) and sustainability at Telkom Indonesia. *Journal of Social and Economics Research, 7*(١).

٢٣. Ausfelt, S. (٢٠٢٥). Innovative approaches to GRC: Ensuring compliance during digital transformation. *Journal of Financial Compliance, 8*(٤), ٣٠٢–٣١٦.

٢٤. Alhamami, M., & Alruwaili, W. S. (٢٠٢٥). Investigating the role of governance, risk, and compliance (GRC) in investment outcomes through digital transformation in Saudi context. *European Journal of Sustainable Development, 14*(٢), ١١٢–١٢٥.

٢٥. Taufiq, M. (٢٠٢٣). Literacy study on governance, risk and compliance (GRC) and performance. *International Journal of Management, Economics and Accounting, 1*(٢), ٤٥–٥٨.

٢٦. Karthick, M. V., Prabhakaran, J., Banu, M. P., & Kumar, U. S. S. (٢٠٢٤). *Systematic literature review on GRC: A study on best practices and implementation strategy in GRC* [Unpublished manuscript]. ResearchGate.

٢٧. Hassan, N. A. M. (٢٠٢٤). *The role of agility in audit, corporate governance, risk and compliance (AGRC) for financial performance in listed government-owned companies* [Master's thesis, Universiti Utara Malaysia]. UUM Electronic Theses and Dissertations (ETD).

٢٨. Filardi, F., & Macedo, F. (٢٠٢٤). Analysis of the results of the integrated governance, risk and compliance processes implementation in companies listed on the stock exchange. *Revista Eletrônica de Estratégia & Negócios*, *17*(١), ١–١٨.

٢٩. Halliday, N. (٢٠٢٤). Advancing organizational resilience through enterprise GRC integration frameworks. *International Journal of Advanced Multidisciplinary Research*, *١*(١٠), ١١٢–١٢٥.

٣٠. Pradipta, A., & Siahaan, M. (٢٠٢٤). Integrated GRC strategies in dynamic business environments. *American International Journal of Business Management*, *8*(٧), ٣١–٤٠.

٣١. Bukhari, T. T., Oladimeji, O., Etim, E. D., & Ajayi, J. O. (٢٠٢١). Creating value-driven risk programs through data-centric GRC strategies. *Shodhshauryam: International Refereed Research Journal*, *8*(٢), ٤٥–٥٩.

٣٢. Andronache, A., AIthonayan, A., & Matin, S. M. (٢٠٢١). *Relevance of GRC in expanding the enterprise risk management capabilities* .

٣٣. Flanding, J. P., & Grabman, G. M. (٢٠٢٢). Uniting governance, risk, and compliance to generate cultural change. In *Purpose-driven innovation: Lessons from managing change in the United Nations* (pp. ١٧٧–١٩٢). Emerald Publishing.

٣٤. Dewi, F. C., & Aryati, T. (٢٠٢٤). The influence of governance, risk and compliance (GRC) and company characteristics on financial performance with moderation of IT investment in the era of digital transformation. *Indonesian Interdisciplinary Journal of Business and Economics, 7*(٢), ٤٥–٦٠.

٣٥. Andrade e Silva Forte dos Santos, N. (٢٠٢١). *Corporate governance, risk management and compliance (GRC): The crossroads between law studies with international relations and diplomacy >*

٣٦. Chhetri, I. T. (٢٠٢٢). Cybersecurity and governance, risk and compliance (GRC). *Australian Journal of Wireless Technologies, Mobility and Security, 1*, ٢٢–٣٠.

٣٧. Pariela, E. P. R., & Suparno. (٢٠٢٥). Integrated GRC as a risk mitigation effort in company management in the pawn industry to improve the national economy. *Journal of Social Science (JoSS)*.

٣٨. Subedi, S. (٢٠٢٢). IT governance, risk and compliance. *Australian Journal of Wireless Technologies, Mobility and Security, 1*, ٣١–٣٩.

٣٩. Abbas, A. A. I., & Mahdy, F. (٢٠٢٣). A human resources management perspective on the complementary relationship between the success of the GRC model, employee perception, and the achievement of organizational goals. *Migration Letters, 20*(S٨), ١١٢–١٢٥.

٤٠. Kembaren, S. Y., Endro, G., & Siregar, S. (٢٠٢٢). Effect of governance, risk management and compliance on a firm's value (healthcare industry). *International Journal of Scientific Research in Management, 10(3), 45–53. https://doi.org/10.18535/ijsrm/v10i3.em06*

٤١. Siahaan, M., Suharman, H., Fitrijanti, T., & Siahaan, R. M. (٢٠٢٣). Will the *integrated GRC implementation be effective against corruption? Journal of Financial Crime, ٣٠(٩), ١١٢٥–١١٤٠. https://doi.org/١٠,١١٠٨/JFC-٠٣-٢٠٢٣-٠٠٤٥*

٤٢. Arbay, E. A., & Pasha, J. A. (٢٠٢٣). Governance, risk management and compliance to enhance sustainability finance in Indonesia

٤٣. Faruq, M. O. (٢٠٢٥). A meta-analysis of cybersecurity framework integration in GRC platforms: *Evidence from U.S. enterprise audits. Journal of Sustainable Development and Policy, 8(1), 77–92.*

٤٤. Al-Sartawi, A. (٢٠٢٤). Governance, Risk, and Compliance (GRC) Practices and Financial Performance of Islamic Banks in the GCC. *Journal of Governance and Regulation, 13(2), 45–60.*

٤٥. Alqahtani, F. (٢٠٢٢). Governance, Risk Management and Compliance Practices in Saudi Banks. International Journal of Financial Studies, ١٠(٤), ١–٢٠.

٤٦. Aldousari, A., Al-Otaibi, M., & Al-Mutairi, K. (٢٠٢٥). How Foreign and Domestic Ownership Influenced Risk-Taking in GCC Banks (٢٠١٤–٢٠٢٢). Journal of Risk and Financial Management, ١٣(١), ٣٣.

٤٧. Al Ali, H. (٢٠٢٣). GCC Banking Companies' Risk Management Practices and Their Impact on Financial Performance.Global Business Review, ٢٤(٦), ١–١٦.
٤٨. Dhar, S., Zaman, S., & Akther, S. (٢٠٢٤). Corporate Governance and Risk Management in Banking Institutions: Evidence from GCC Countries. ResearchGate.
٤٩. Mselmi, N., & Mahmoud, M. (٢٠٢٥). Governance and Risk-Taking in GCC Banks: Evidence from the SRISK-Entropy Model. Research Square.
٥٠. Mukhibad, H. (٢٠٢٢). Corporate Governance and Islamic Law Compliance Risk in Islamic Banks. Cogent Economics & Finance, ١٠(١), ٢١١١٠٥٧.
٥١. OCEG. (٢٠٢١). The GRC Capability Model (Red Book ٣،٥). OCEG Press.
٥٢. McKinsey & Company. (٢٠٢٤). The State of GCC Banking: An Exceptional Operating Environment. Retrieved from
٥٣. IMARC Group. (٢٠٢٤). Saudi Arabia Governance, Risk and Compliance Platform Market Size & Trends Report.Retrieved from
٥٤. ResearchGate. (٢٠٢٥). Investigating the Role of Governance, Risk, and Compliance (GRC) in Investment Outcomes through Digital Transformation in Saudi Context. Retrieved from

Abstract in Arabic

هدفت هذه الدراسة الوصفية المقطعية إلى تقييم العلاقة بين الحوكمة وإدارة المخاطر والامتثال (GRC) وتحقيق الأهداف الإستراتيجية في البنوك ولجمع بيانات الدراسة، قام الباحث بتوزيع **(٣٨٣)** استبانة على الموظفين العاملين في البنوك ، وتم استرجاع **(٣٦١)** استبانة صالحة للتحليل الإحصائي، بنسبة استجابة بلغت حوالي (٩٤,٣٪). وقد استُخدمت هذه العينة لفحص مدى إسهام أثر الحوكمة وإدارة المخاطر والامتثال في تعزيز الاستقرار المالي والقدرة التنافسية المستدامة في البنوك التجارية، إضافة إلى استكشاف طبيعة العلاقة بين هذه الأثر وتحقيق الأهداف الإستراتيجية.

أظهرت نتائج الدراسة وجود ارتباط سلبي دال إحصائياً عند مستوى (٠,٠١) بين التباين التنظيمي عبر الولايات القضائية وفاعلية أنظمة الحوكمة وإدارة المخاطر والامتثال في البنوك الدولية، ويُعزى هذا الارتباط السلبي إلى أن تعدد الأنظمة وتباين المتطلبات الرقابية يزيد التعقيد ويُضعف الانسجام التشغيلي، مما يؤدي إلى انخفاض كفاءة تطبيق أنظمة .GRC وقد دعم ذلك الفرضية الأولى.

كما بينت النتائج وجود أثر إيجابي دال إحصائياً عند مستوى (٠,٠١) للمدخلات المتكاملة لإدارة المخاطر الناشئة على أنظمة الحوكمة وإدارة المخاطر والامتثال، ويرجع هذا الأثر الإيجابي إلى أن تبني منهج متكامل لإدارة المخاطر الناشئة يعزز القدرة على التنبؤ والتعامل المبكر مع التحديات، مما يرفع فعالية أنظمة .GRC وقد أكد ذلك صحة الفرضية الثانية.

وأوصت الدراسة بتعزيز استخدام أثر الحوكمة وإدارة المخاطر والامتثال في تحديد جوانب القصور داخل العمليات الداخلية والعمل على تحسينها، وتقوية مواءمة الأهداف الإستراتيجية للحد من التعارضات المحتملة، واعتماد منهج متكامل لإدارة المخاطر الناشئة لضمان المتابعة المستمرة والتحسين المستدام، إضافة إلى استثمار التنوع التنظيمي في جذب الكفاءات العالية.

الكلمات المفتاحية :الحوكمة، إدارة المخاطر، الامتثال، الأهداف الإستراتيجية.

The relationship between governance, risk management, and compliance (GRC) and the achievement of strategic objectives in banks

Dear participants,

Greetings

Part One: Demographic Characteristics
Gender
● Male
● Female
Age
● Less than ٢٥
● ٢٥ - ٣٠
● ٣١- ٣٥
● More than ٣٥
Educational level
● Diploma
● Bachelor's
● Master's
● Doctorate
Experience in years
● Less than ٥
● ٥ -١٠
● ١١ -١٥
● ١٦ - ٢٠
● More than ٢١
Job Category
● Employee
● Loan Officer
● Department Head
● Branch Manager

.

Part two:

The following are a set of questions related to the study variables. Please mark (√) the appropriate answer.

Strongly Dis Agree (SDA)	Dis Agree (DA)	Neutral (N)	Agree (A)	Strongly Agree (SA)

Governance, Risk Management, and Compliance (GRC):	SDA	DA	N	A	SA
	١	٢	٣	٤	٥
١. Governance, risk management, and compliance (GRC) help understand how effectively an organization manages its risks.					
٢. GRC helps identify areas of weakness that need improvement in internal processes.					
٣. GRC contributes to improved decision-making and overall organizational performance.					
٤. GRC ensures regulatory compliance requirements are met and reduces uncertainty.					
٥. GRC contributes to lower costs by effectively managing risk.					
Achievement of Strategic:					
١. Strategic objectives provide flexibility to respond to urgent changes in the business environment.					
٢. Strategic objectives are achieved using advanced technology.					
٣. Strategic objectives are achieved using innovative methods.					
٤. Strategic objectives are aligned without conflict.					
٥. Strategic objectives are achieved, contributing to customer satisfaction.					

٦. regulatory heterogeneity:					
٧. regulatory heterogeneity enriches the work environment with new ideas and perspectives.					
٨. regulatory heterogeneity helps build a positive brand image.					
٩. regulatory heterogeneity enables better understanding and meeting the needs of a diverse customer base.					
١٠. regulatory heterogeneity contributes to attracting the best talent.					
١١. regulatory heterogeneity encourages critical thinking and unconventional solutions.					
integrated approaches for emerging risks:					
١. integrated approach to emerging risks contributes to establishing a clear governance structure and defining responsibilities.					
٢. integrated approach to emerging risks ensures effective communication about risks to all stakeholders.					
٣. integrated approach to emerging risks continuously monitors risks and continuously improves the risk management process.					
٤. integrated approach to emerging risks contributes to the development and implementation of strategies to control and mitigate risks.					
٥. An integrated approach to emerging risks brings all separate risk management practices into a single, coherent framework.					
Organizational culture:					
١. Organizational culture guides employees and directs their behaviour within the workplace.					
٢. Organizational culture enhances and increases productivity.					

٣. Organizational culture contributes to encouraging creativity and innovation.					
٤. Organizational culture influences the ability to attract and retain top talent.					
٥. Organizational culture contributes to improved decision-making processes.					
artificial intelligence:					
١. Governance helps prepare for compliance with emerging laws and regulations related to artificial intelligence.					
٢. Governance establishes guidelines to ensure that artificial intelligence is used in an ethical and responsible manner.					
٣. The use of AI under governance increases the accuracy of risk data.					
٤. AI under governance contributes to increased reporting efficiency.					
٥. AI under governance increases the speed of decision-making.					
global regulatory standards:					
٦. The implementation of global regulatory standards (such as Basel III) contributes to lower operating costs.					
٧. The implementation of global regulatory standards (such as Basel III) contributes to more efficient compliance.					
٨. The implementation of global regulatory standards (such as Basel III) provides mechanisms for assessing and managing market risks.					
٩. The implementation of global regulatory standards (such as Basel III) protects the financial system from future crises.					
١٠. The implementation of global regulatory standards (such as Basel III) contributes to providing regular and transparent disclosures to the public.					

financial sustainability and strategic alignment:					
١. Financial sustainability works to use resources efficiently to achieve the highest return at the lowest cost.					
٢. Financial sustainability contributes to developing financial strategies aimed at achieving long-term sustainability.					
٣. Financial sustainability creates multiple ways to generate revenue.					
٤. Financial sustainability increases the ability to adapt to economic and financial changes.					
٥. Financial sustainability enables the provision of transparent and reliable financial reports.					
Regulatory sandboxes and flexible compliance mechanisms:					
١. Regulatory sandboxes and flexible compliance mechanisms allow for evaluating the effectiveness of existing compliance programs and making informed decisions about necessary improvements or modifications.					
٢. Regulatory sandboxes and flexible compliance mechanisms contribute to responding quickly to frequent regulatory changes.					
٣. Regulatory sandboxes and flexible compliance mechanisms allow for better keeping pace with changing regulations, especially as they become increasingly complex and stringent.					
٤. Regulatory sandboxes and flexible compliance mechanisms enhance the confidence of customers, investors, and regulators in the integrity and ethics of an organization.					
٥. Regulatory sandboxes and flexible compliance mechanisms contribute to protecting both tangible and intangible assets.					